

### Weston Solutions, Inc.

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26 September 2018

Mr. Mark Wooten Brownfields Redevelopment Program City of Houston Department of Public Works & Engineering 1002 Washington, Office 339 Houston, Texas 77002

RE: Phase II Environmental Site Assessment
3915 McKinney Street, Houston, Texas 77067
Harris County Appraisal District (HCAD) Property Numbers 0450450000013

Dear Mr. Wooten:

Weston Solutions, Inc. (WESTON®) has prepared this letter report to provide the results of the Phase II Environmental Site Assessment (ESA) conducted in June 2018 at the above-referenced subject property in Houston, Texas. Field activities were performed to evaluate potential environmental conditions associated with historical property use.

This Phase II ESA Report describes the scope of work, investigation methods, results of sampling and laboratory analysis, and conclusions/recommendations from the ESA. Attachments follow the text and are listed below:

- Attachment A–Figures
- Attachment B–Asbestos-Containing Material and Lead-Based Paint Inspection Reports
- Attachment C–Geophysical Survey
- Attachment D-Field Notes, Boring Logs, Well Reports, and Plugging Reports
- Attachment E–Data Tables
- Attachment F–Data Usability Summary and Analytical Data Packages

### BACKGROUND

The COH provided WESTON a Phase I ESA for the site that was completed in May 2017. As noted in the Phase I ESA, the site was previously utilized as a nickel and trivalent chromium electroplating facility. Other historical tenants/property usage included a paint and body shop, concrete block manufacturer, a sprinkler corporation, transportation service, and a jewelry company. At the time of the Phase I ESA, three buildings were present at the site:

- Building 1 Former electroplating operations; 3,000 square feet, constructed in 1940
- Building 2 Office warehouse; 7,952 square feet, constructed in 1974
- Building 3 Warehouse; 1,900 square feet, constructed in 1980



The Phase I ESA revealed the following recognized environmental conditions (RECs) in connection with the subject property:

- The site is an industrial hazardous waste (IHW) permitted facility, Solid Waste Registration No. 87244. Concrete stains and cracked concrete indicated a potential release.
- An underground storage tank (UST) may be on-site or was removed with no documentation (associated with a potential dispenser observed on the west side of the site).
- Historical use as a paint and body shop.
- Proximity to a historical unregistered filling station south of the subject property (3418 McKinney).

A site visit by the WESTON Project Manager on 8 March 2018 revealed that the former plating building (Building 1) was no longer present. In addition, the subject property was currently utilized by East End Athletic Club.

### SCOPE OF WORK

The Phase II ESA scope of work (SOW) included the following activities:

- Completing an asbestos-containing material (ACM)/lead-based paint (LBP) inspection to evaluate the structures on the property,
- Conducting a geophysical survey to assess whether an underground storage tank may be present,
- Completing five shallow soil borings and two permanent monitor wells and collecting soil and groundwater samples to assess the potential presence of chemicals of concern (COCs) in on-site media.

The work was completed in accordance with the U.S. Environmental Protection Agency (EPA)-approved June 2018 Field Sampling Plan (FSP).

A Site Location Map is included as Figure 1 and a Sample Location Map (that also presents the site layout) is included as Figure 2.

### PHASE II ESA ACTIVITIES

### ACM/LBP INSPECTION

On 7 June 2018, Mr. Robert L. Voorhies of A & B Environmental Services, Inc. (A&B, a Texas Department of State Health Services [TDSHS] licensed Asbestos Consulting Agency [License No. 10-0094]) conducted the ACM/LBP inspection. Mr. Voorhies is a TDSHS licensed asbestos consultant (License No. 10-5524).



A total of 14 bulk samples were collected and analyzed for asbestos in accordance with the June 2018 FSP. Per the attached *Limited Asbestos Inspection* report (included in Attachment A) prepared by A&B, asbestos at regulated levels exceeding 1% was reported in the following materials:

- Eight joint compound/wall texture samples collected from the sheetrock walls in the office area and adjoining south wall of the middle warehouse/gym area.
- Three floor tile samples from the break room, northeast storage room closet, and utility closet in the northwest office.

As noted in the *Limited Asbestos Inspection* report, based on visual inspection and limited sampling, it is likely that the only regulated ACM are the materials previously noted. The sheetrock and vinyl tile appeared to be in generally good condition. There is no regulatory requirement that any ACM must be removed unless it is damaged and poses a health risk to the occupants or general public, or if renovations or demolition will damage or disturb it. The existing walls and vinyl floor tile may be left in place indefinitely. Maintenance activities such as cleaning, painting, and patching may be conducted as non-regulated activities. Asbestos containing floor tiles can be covered by new tiles, carpet, or other material as long as the existing tiles are not damaged or disturbed.

On 7 June 2018, Mr. Voorhies collected six samples of paint for lead analysis to determine if significant amounts of lead containing paint materials are likely to be present on-site. As noted in the June 2018 *Limited Paint Sampling* report (included in Attachment A), the reported concentrations of lead in three of the samples collected were below the sample detection limit (SDL) of 4 to 6.8 milligrams per kilogram (mg/kg). The reported lead concentrations in the remaining three samples ranged from 15.8 to 161 mg/kg. The legal definition of LBP is paint containing more than 5,000 mg/kg of lead. The *Limited Paint Sampling* report concluded that based on the limited LBP sampling, it is unlikely that significant amounts of LBP are present in the areas where samples were collected.

### **GEOPHYSICAL SURVEY**

The geophysical survey was performed 7 June 2018 by Earth Measurement Corporation (EMC) to assess site and subsurface conditions. The geophysical survey was completed to confirm the potential presence of USTs and identify locations of utilities and/or subsurface objects in the vicinity of planned soil boring and monitor well locations.

The geophysical survey utilized three instruments to assess the potential presence of buried objects:

- 1. Ground penetrating radar (GPR, detects changes in subsurface materials).
- 2. Electromagnetic magnetic meter (to detect ferrous materials).
- 3. Radio detection meter (to detect lines, pipes, and cables).



As documented in the June 2018 *Geophysical Subsurface Investigation Survey* report included in Attachment C, a total of nine pipelines/conduits were located during the survey, and these linear anomalies are shown on the Interpretive Map included in the *Geophysical Subsurface Investigation Survey* report. Three anomalous areas were also identified during the survey; however, none of the anomalies showed a definitive geophysical signature that indicated a UST may be present.

The soil boring and well locations were either deemed clear of drilling hindrances. If a pipeline or utility was observed, the boring and/or well locations were adjusted to make sure they were clear of subsurface obstructions identified during the survey.

### SOIL BORING COMPLETION/SAMPLE COLLECTION

Prior to commencing drilling activities for the soil borings and monitor wells, utilities were located using the Texas One Call system (as well as using geophysical instrumentation as previously described) to clear the locations.

On 21 and 22 June 2018, WESTON's drilling subcontractor, Best Drilling Services (Best), mobilized a direct-push-type rig and a hollow-stem auger (HSA) rig from Houston, Texas to the site to complete five soil borings (SB-01 to SB-05) and two monitor wells (MW-01 and MW-02). The boring and well locations are included on Figure 2 and were located as follows:

- SB-01 was located in the back of the main building, where historical activities reportedly were conducted.
- SB-02 was completed in the northeastern parking lot.
- SB-03 was located between the main building and former plating building as this was a transfer area and staining was observed on the ground surface.
- SB-04 was located in front of the plastic bumper shop since paint reportedly drained from this building toward a storm drain.
- SB-05 was located in front of the former plating building.
- MW-01 was located in the southwestern corner of the property, in the vicinity of what was suspected to be a former dispenser island/potential UST.
- MW-02 was located within the former plating building footprint.

The soil borings were completed to a depth of 10 feet below ground surface (bgs) and the monitor well borings were completed to a depth of 30 feet bgs (at least one foot into the confining clay layer underlying the first groundwater-bearing unit [GWBU]). Continuous soil cores were collected, and a WESTON geologist logged and classified the recovered soil cores and screened the soils for the presence of organic vapors using a portable flame ionization detector (FID). The subsurface lithology encountered consisted of clay to a depth ranging from 19.75 feet bgs (MW-02) to 25 feet bgs (MW-01), which was underlain by 9 to 16.5 feet of wet to



saturated clayey sand and sand (considered the first GWBU). The first GWBU was underlain by clay to the completion depth of each boring. The highest FID reading measured was 13.3 units, which was not indicative of organic vapors. The only staining observed in the soil was a bright green color at 10 feet in the MW-02 boring.

Two soil samples were collected from each soil boring (including the well borings) from intervals selected by the field geologist based on observations (staining, odors) and FID readings. If observations from a specific boring did not indicate the potential presence of hydrocarbons or other contaminants, soil samples were generally collected from depths of 5 and 10 feet. Due to higher FID readings, a soil sample was collected from 9 feet bgs (instead of 10 feet) in SB-02 and 1 foot bgs (instead of 5 feet) in MW-02.

With the exception of MW-01, soil samples were analyzed by A&B Analytical (A&B) in Houston, Texas for Resource Conservation and Recovery Act (RCRA) 11 Metals by EPA Method 6020 (7471 for mercury) and cyanide by EPA Method 9010C. Six soil samples (collected from the upper sample depth in each soil boring and MW-02 boring) were also analyzed for volatile organic compounds (VOCs) by EPA Method SW8260B/5035.

Soil samples collected from MW-01 were analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8260 and total petroleum hydrocarbons (TPH) by TX Method 1005, since this location was in the vicinity of the suspected UST. The 10-foot interval soil sample from MW-02 was also be analyzed for pH by EPA Method SW9045D and fraction organic carbon (FOC) by Walkley-Black Method by TestAmerica.

One duplicate soil sample, SB-10(5) was collected from 5 feet bgs from SB-04 for quality assurance/quality control (QA/QC) purposes. This duplicate sample was submitted for RCRA 11 metals/mercury, cyanide, and VOCs analyses. A standard turnaround time for all soil analyses was requested.

Note, soil samples were also to be analyzed for hexavalent chromium by Standard Method (SM) 3500. However, due to the preliminary reported concentrations of total chromium being below the Texas Risk Reduction Program (TRRP) Tier 1 0.5-acre source area residential soil to groundwater ingestion ( $^{GW}$ Soil $_{Ing}$ ) protective concentration level (PCL) of 28 mg/kg for hexavalent chromium, analysis of hexavalent chromium was not required. In addition, based on the preliminary TPH 1005 data reported by A&B (no TPH carbon ranges were reported above SDLs), analysis of polyaromatic hydrocarbons (PAHs) was not required.

Following completion of soil borings SB-01 to SB-05, the boreholes were plugged to the ground surface with hydrated bentonite chips. The sample locations are shown on Figure 2.

Boring logs and field documentation of drilling activities are included in Attachment D.

### MONITOR WELL DEVELOPING AND SAMPLING

Upon reaching the completion depth for MW-01 and MW-02 (30 feet bgs), a 2-inch Schedule 40 polyvinyl chloride monitor well was installed. Each monitor well was constructed with a 0.5-



foot sump, 10 to 20 feet of 0.010-inch slotted screen, riser to surface, and a surface completion. The well by the suspected UST was completed so the well screen intersected the water table.

The newly installed wells were developed on 25 June 2018 2018. On 26 June 2018, wells MW-01 and MW-02 were gauged, then purged and sampled with a peristaltic pump following low-flow sampling procedures. The depth to groundwater measurements ranged from 12.42 feet bgs in MW-02 to 12.68 feet bgs in MW-01. During well purging, water quality parameters including pH, temperature, and specific conductivity were monitored and recorded on the field data sheets included in Attachment D.

The groundwater sample from monitor well MW-01 was analyzed for BTEX, TPH, PAHs, RCRA 11 metals, mercury, hexavalent chromium, and cyanide by A&B. The groundwater sample from MW-02 (and its duplicate, MW-12) was analyzed for VOCs, RCRA 11 metals, mercury, hexavalent chromium, and cyanide. Two sets of groundwater samples (filtered and non-filtered) were collected for RCRA 11 metals, mercury, and hexavalent chromium analyses. The non-filtered samples for RCRA 11 metals, mercury, and hexavalent chromium were initially analyzed. Based on the preliminary laboratory data for the non-filtered samples, analysis of the filtered samples was not required. A standard turnaround time for all soil analyses was requested.

The locations of the wells are shown on Figure 2. Field documentation of monitor well completion and groundwater sampling activities as well as well logs and State Well Reports are included in Attachment D.

### **WELL PLUGGING**

Monitor wells MW-01 and MW-02 were plugged and abandoned on 17 September 2018 by Best. The wells were plugged as specified in the FSP. Field documentation of the well plugging activities as well as the plugging reports are included in Attachment D.

### **QA/QC SAMPLES**

In addition to the field duplicates previously discussed, other QA/QC samples collected included two field blanks (one collected during soil sampling and one collected during groundwater sampling). One trip blank was included in each cooler containing samples for VOC analysis. The field blank and trip blanks were analyzed for VOCs. Analytical data for QA/QC samples is included in Attachment F.

### **INVESTIGATION-DERIVED WASTE**

The investigation-derived waste (IDW) generated from site assessment activities was placed in 55-gallon steel drums for temporary storage on-site. The IDW consisted of four drums of soil cuttings, one drum of decontamination water with plastic sheeting (from decontamination pad), and three drums of development/purge water. One composite soil sample was collected for laboratory analysis (on a standard turnaround time) by A&B for waste classification purposes. The soil IDW sample was analyzed for toxic characteristic leachate procedure (TCLP) RCRA 11



Metals, TCLP VOCs, TCLP semivolatile organic compounds (SVOCs), and TPH and cyanide. The groundwater data collected from the two wells was used to classify the drummed water.

### **DATA COLLECTED**

### **SOIL DATA**

Reported concentrations of COCs in soil were compared to TRRP Tier 1 0.5-acre source area <sup>GW</sup>Soil<sub>Ing</sub> PCLs, direct contact <sup>Tot</sup>Soil<sub>Comb</sub> PCLs, and Texas Specific Background Concentrations for metals. The soil analytical data, as reported by the laboratory, are presented on Tables E1 and E2 in Attachment E and the laboratory data package is included in Attachment F. A brief discussion of the soil results is presented in the following section (reported results represent the higher of the normal or the duplicate soil concentrations).

- Metals—All metals analyzed were reported in at least one soil sample. Concentrations of metals were not reported in the groundwater samples collected from the site. As a result, the applicable critical PCL for these metals is the higher of the TotSoilComb PCL or the Texas Specific Background concentration.
  - O Arsenic was reported in all the samples collected. The reported concentration in SB-02 was above the Texas Specific Background concentration of 5.9 mg/kg. The reported concentration in SB-03 was slightly above the Texas Specific Background concentration of 5.9 mg/kg. All reported concentrations of arsenic were below the TotSoilComb PCL of 24 mg/kg.
  - Concentrations of barium were reported in all the samples collected. Concentrations were above the Texas Specific Background concentration of 300 mg/kg in MW-02 (10 feet) and SB-03 (10 feet). However, all reported concentrations were below the TotSoilComb PCL of 8,100 mg/kg.
  - Lead was reported in all the samples collected. Reported concentrations in MW-02 (1 foot) and SB-04 (5 feet) were above the Texas Specific Background concentration of 15 mg/kg. All reported concentrations of lead were below the TotSoilComb PCL of 500 mg/kg.
  - o Mercury was reported at a concentration above the Texas Specific Background concentration (0.04 mg/kg) in one soil sample, MW-02 (1 foot). However, this reported concentration was below the TotSoilComb PCL of 8.3 mg/kg.
  - Nickel was reported at a concentration in one soil sample, MW-02 (1 foot) that exceeded the Texas Specific Background concentration of 10 mg/kg, and the TotSoilComb PCL of 840 mg/kg.
  - o The remaining reported concentrations of metals were below their respective PCLs.



- TPH TPH concentrations in the MW-01 soil samples were not reported above the SDLs.
- BTEX/VOCs Concentrations of BTEX or VOCs were not reported above their respective SDLs in any of the soil samples collected.

The distribution of COCs in soil based on the Phase II collection is depicted on Figure 3 in Attachment A.

### **GROUNDWATER DATA**

Reported concentrations in the groundwater samples from MW-01 and MW-02 were compared to TRRP Tier 1 Residential PCLs for the groundwater ingestion ( $^{GW}GW_{Ing}$ ) exposure pathway. The groundwater analytical results are presented on Tables E3 to E5 in Attachment E and the laboratory data package is included in Attachment F. A brief discussion of the groundwater data is presented in the following section.

- Arsenic, barium, nickel, and selenium were the only metals reported above SDLs (some at estimated concentrations) in the groundwater samples collected. None of the reported concentrations of metals exceeded their <sup>GW</sup>GW<sub>Ing</sub> PCLs.
- Cyanide was not reported above the SDL in either groundwater sample collected.
- Ethylbenzene was reported at an estimated concentration in the groundwater samples collected from MW-01 and MW-02 (duplicate sample only). However, the reported concentrations are below the PCL.
- Styrene was reported at an estimated concentration in the duplicate sample collected from MW-02, but not in the parent sample collected. However, due to styrene being reported in the trip blank, this estimated concentration was qualified as not reported above the SDL.
- TPH and PAHs were not reported above the SDLs in the MW-01 groundwater sample.

The reported concentrations for groundwater are depicted on Figure 4.

### **INVESTIGATION-DERIVED WASTE**

Analytical results from the IDW soil sample and groundwater data indicated that the IDW was classified as a Class 2 non-hazardous waste.

The soil and water IDW was transported from the site on 25 September 2018 by IKON Environmental Solutions (IKON) for off-site disposal at the Fort Bend Regional Landfill facility in Needville, Texas. The IDW soil analytical data package is are included in Attachment F and waste disposal documentation is included in Attachment D.



### **DATA USABILITY SUMMARY**

Analytical results were reviewed according to guidelines presented in the TCEQ regulatory guidance *Review and Reporting of COC Concentration Data* (RG-366/TRRP-13) issued May 2010. The Data Usability Summary (DUS) report contains the results of the data review for soil and groundwater samples collected in July 2018. The DUS report (which include the analytical data packages) are included in Attachment F.

With the exception of the antimony concentration reported in the MW-02 soil sample collected from one foot bgs, the laboratory analytical data resulting from the Phase II ESA activities were deemed usable for the project. The associated MS/MSD percent recovery for antimony was below the lower acceptable limit. Since the recovery was so low, and antimony was not reported above the SDL in this sample, its presence and concentration are difficult to quantify. Since the laboratory control sample (LCS) recoveries were within acceptable criteria, the poor MS/MSD recovery is most likely due to the soil matrix and not laboratory instrumentation. The reported antimony concentrations in the remaining samples may be biased low, but these reported concentrations are at least one order of magnitude below the <sup>GW</sup>Soil<sub>Ing</sub> PCL, the Texas Specific Background Concentration, and the <sup>Tot</sup>Soil<sub>Comb</sub> PCL. As a result, antimony is not considered a chemical of concern.

### CONCLUSIONS AND RECOMMENDATIONS

Phase II ESA activities were performed in June 2018 at the site to evaluate potential environmental conditions associated with historical property use. Conclusions and recommendations are provided as follows:

- As long as demolition activities are not planned, no response actions are required for materials containing asbestos. Care should be taken to not disturb the asbestoscontaining materials identified during the survey.
- Several metals (arsenic, barium, lead, mercury, and nickel) were reported in one or more of the soil samples at concentrations exceeding Texas Specific Background Concentrations. All reported metals concentrations, except nickel in MW-02 (1 foot), were reported below their TotSoilComb PCLs. None of the metals reported in soil were reported in groundwater samples above their PCLs. The soil to groundwater pathway does not appear to be a complete exposure pathway that would require response actions under TRRP.
- Nickel is commonly associated with plating activities. The area containing soil with elevated concentrations of nickel appears to be very limited. If reported to TCEQ, additional assessment of nickel in shallow soil may be required under TRRP to evaluate whether the direct contact pathway is a complete exposure pathway requiring a response action. The assessment may consist of collecting a few shallow soil samples below a depth of 1 foot in the immediate vicinity of MW-02. If response



actions are warranted, surficial soil in the area of MW-2 may be excavated and disposed at a licensed facility.

■ Since no affected groundwater is present based on the groundwater samples collected from wells MW-01 and MW-02, the wells were plugged and abandoned on 17 September 2018.

### **CLOSING**

If the City of Houston has any questions or comments regarding this report, please contact me at (713) 985-6610.

Very truly yours, WESTON SOLUTIONS, INC.

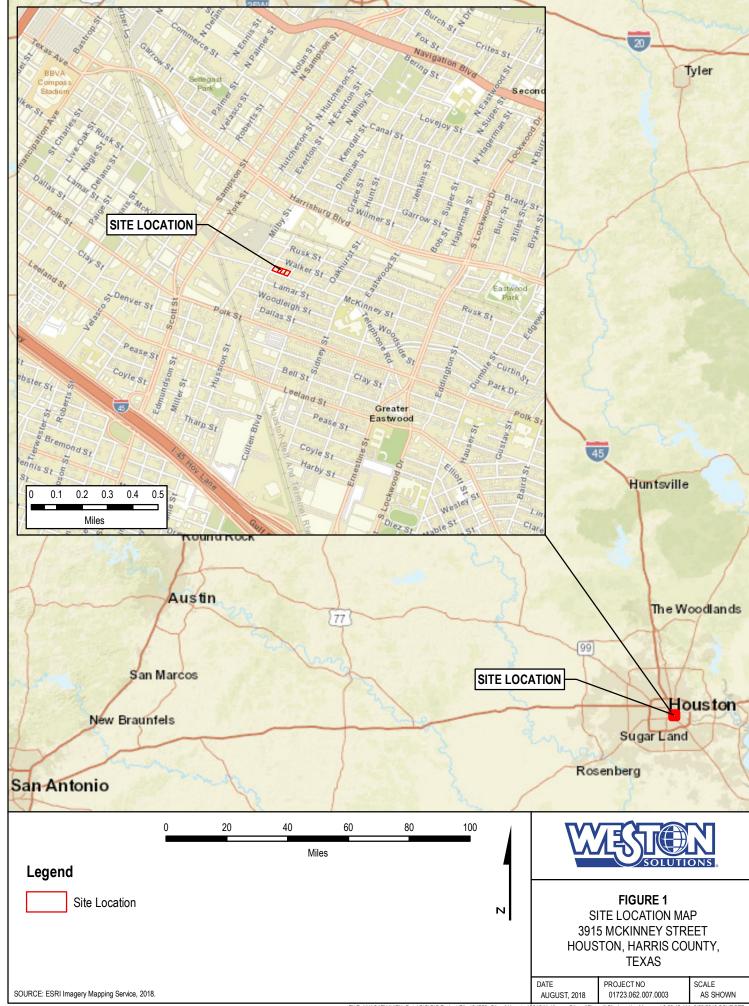
Dawn Denham, P.G.

Dawn Denham, P.G. Project Manager

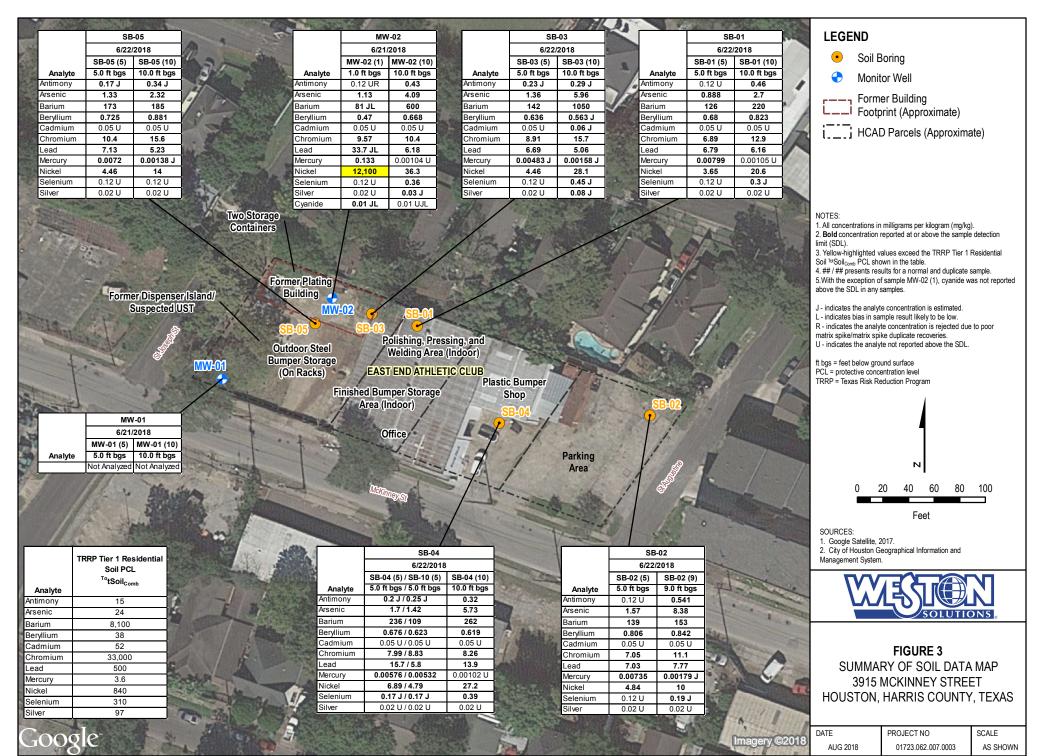
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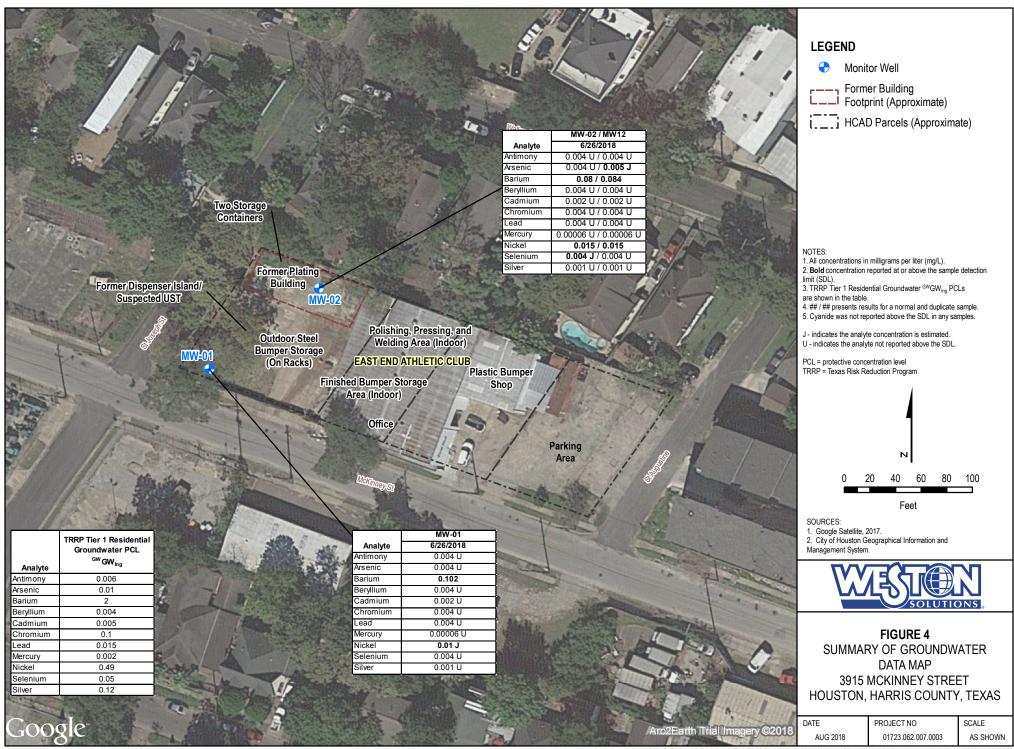
cc: Ashby McMullan (WESTON)











ATTACHMENT B
ASBESTOS-CONTAINING MATERIAL AND LEAD-BASED PAINT
INSPECTION REPORTS



Re: 3915 McKinney Project ID 18060406 A & B Environmental Services, Inc.

June 16, 2018

**Weston Solutions** 5999 San Felipe Suite 700 Houston TX 77056 Attn: Dawn Denham

Re: LIMITED ASBESTOS INSPECTION – 3915 MCKINNEY ST HOUSTON TX

The following is your final report of the limited asbestos inspection of the commercial building located at 3915 McKinney St in Houston, TX. The inspection was conducted on June 7, 2018 by Robert L. Voorhies, a DSHS licensed Asbestos Consultant (DSHS License #10-5524, exp. date 3/9/2018). A total of 14 asbestos bulk samples were collected and analyzed per the Clients instructions. Mr. Voorhies is employed by A & B Environmental Services, Inc., a DSHS licensed Asbestos Consulting Agency (DSHS license # 10-0094).

The inspection was done in conjunction with a Phase 2 Environmental Site Assessment done by Weston Solutions. Because of the limited number of suspect materials present, adequate samples to meet the State requirements for conducting an asbestos survey to obtain a renovation permit were collected, analyzed and reported.

All bulk asbestos samples were analyzed in the Texas Dept. of State Health Services (DSHS) licensed (#30-0080) and EPA/NVLAP accredited laboratory (#101793-0) of A & B Environmental in their facility at 10100 I-10 East Suite 100 in Houston, Texas. The EPA Method 600/R-93/116, July, 1993, was used for asbestos analysis. Components of non-homogeneous samples were analyzed and reported separately. Percentages of asbestos reported are based on calibrated microscopic visual inspection.

### **FINDINGS**

Asbestos at regulated levels exceeding 1% was found in the following materials:

All 8 Joint compound/wall texture samples on the sheetrock walls in the office area and adjoining south wall of the middle warehouse/gym area

All 3 floor tile samples from the break room, northeast storage room closet, and utility closet in the northwest office.

No asbestos was present in the 3 samples of spray on insulation on the sheet metal walls, ceiling and steel beams in the north end gym/warehouse area.

No other untested exposed suspect materials were observed in the building inspected.

Page- 1 -



A & B Environmental Services, Inc.

Project ID 18060406

The exterior walls and roofs are sheet metal with brick trim. No suspect materials were seen on the exterior of the building.

Based on the visual inspection and limited sampling asbestos it is likely that the only regulated asbestos containing materials are the wall texture/joint compound on the sheetrock walls in the office enclosure and the vinyl floor tiles in the break room, northeast storeroom closet and northwest office closet. No asbestos materials are present in the 2 warehouse/gym areas.

The sheetrock walls and vinyl tile appeared to be in generally good condition. There is no legal requirement that any asbestos containing material must be removed unless it is damaged and poses a health risk to the occupants or general public, or of renovations or demolition will damage or disturb it. The existing walls and vinyl floor tile may be left in place indefinitely. Maintenance activities such as cleaning, painting and patching may be done as non-regulated activities. Asbestos containing floor tiles can be covered by new tiles, carpet or other material as long as the existing tiles are not damaged or disturbed.

Asbestos containing materials in public buildings are regulated under State and Federal asbestos laws. Any disturbance or removal of the sheetrock walls or vinyl floor tiles must be done by a licensed asbestos abatement contractor. All removal must be done inside a negative pressure enclosure. The asbestos materials removed must be properly bagged, sealed and transported to a licensed asbestos landfill for disposal.

The Owner or his representative must hire a licensed asbestos consultant to design and oversee the abatement and perform the State required air sampling and clearance inspection. The law requires that the abatement contractor and consultant be separate companies working independently for the owner so there is no conflict of interest.

Removal of the asbestos materials will release asbestos fibers into the air. Exposure to asbestos is known to cause lung disease, including asbestosis (scarring of the lungs) and lung cancer. Licensed abatement contractors use special containment techniques to prevent the spread of airborne fibers out of the work area and into adjacent spaces and their workers wear respiratory protection to prevent inhaling the fibers. The State requires air monitoring during the abatement to document that asbestos fibers did not escape into the surrounding areas and that at the end of the removal the area is properly cleaned and decontaminated.

This inspection was done in conformance with State regulations for asbestos surveys for purposes of obtaining renovation or demolition permits for commercial building. It may be used as proof of having had an asbestos survey of the site to obtain a renovation or demolition permit.

Phone: 713-453-6060 Fax: 713-453-6091

Re: 3915 McKinney



Re: 3915 McKinney
Project ID 18060406

A & B Environmental Services, Inc.

### **GENERAL**

The asbestos samples were collected in a manner that reduced potential for fiber release and exposure by using wet sampling methods and personal protective equipment, as necessary. All sampling equipment was wet wiped and decontaminated after each use to prevent cross contamination of the samples. All samples were deposited into secure containers for transport to the laboratory of A & B Environmental Services, Inc. in Houston, TX.

The project consisted of inspection of the building with limited sampling of suspect materials in conjunction with a Phase I ESA. The intent of the limited survey was to identify significant quantities of exposed asbestos containing building materials. The limited asbestos inspection was conducted in conformance with current DSHS regulations, which require a minimum of 3 samples collected in each homogenous area for renovation or demolition.

The property is currently occupied by a gym. The building is a commercial structure that has a front office area in the south side, middle warehouse, and north side warehouse. The exterior walls and roofs are sheet metal with brick trim. No suspect materials were seen on the exterior of the building.

The office area has several offices/storerooms, 2 restrooms, and a breakroom/kitchen. The walls are primarily painted sheetrock with wood paneling in some area, primarily the large SW corner office. The floors are almost entirely ceramic tile, with 12" vinyl tile in the breakroom and small closet areas in the northeast storeroom and northwest office. No black mastic was present on the floor tiles or concrete slab. The ceilings are standard 2' X 4' cellulose/fiberglass tiles suspended in a metal grid.

The suspect materials seen in the office area are the wall texture/joint compound on the sheetrock walls (8 samples) and vinyl floor tile (3 samples). One of the joint compound samples is from the north side exterior office wall (south wall of the middle warehouse/gym).

The middle warehouse/gym is a large enclosed area with sheet metal walls and roof and concrete floor. There is yellow fiberglass batt insulation on the roof. No suspect materials were seen there.

The north side warehouse/gym also has sheet metal wall and roof and concrete floor. There is fibrous spray on insulation on the walls and roof in this area. That is the only suspect material. Three (3) samples were collected.

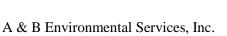
Eight (8) samples of wall texture/joint compound, 3 sample of floor tile and adhesive, and 3 samples of spray on insulation were collected, submitted for analysis and reported. A complete list of all sample locations, types and analytical results is on the following "Summary of Analytical Results". The laboratory analytical reports and chains of custody are also included.



Re: 3915 McKinney Project ID 18060406

### **Summary of Analytical Results**

Sample #	Lab ID#	Type	Location	Result
WT/JC-1	18060406.01	Wall Texture/Joint Compound	Kitchen SE by window	4-9% Asbestos
WT/JC-2	18060406.02	Wall Texture/Joint Compound	Corner of east restroom	4-9% Asbestos
WT/JC-3	18060406.03	Wall Texture/Joint Compound	NE storage room SW corner	4-9% Asbestos
WT/JC-4	18060406.04	Wall Texture/Joint Compound	Office closet west wall	4-9% Asbestos
WT/JC-5	18060406.05	Wall Texture/Joint Compound	west restroom east wall	4-9% Asbestos
WT/JC-6	18060406.06	Wall Texture/Joint Compound	Large SW office S wall by window	4-9% Asbestos
WT/JC-7	18060406.07	Wall Texture/Joint Compound	Lobby SW by door to large office	4-9% Asbestos
WT/JC-8	18060406.08	Wall Texture/Joint Compound	Office enclosure exterior north wall in middle warehouse	4-9% Asbestos
FT-1	18060406.09	Floor Tile	Kitchen	4-9% Asbestos
FT-2	18060406.10	Floor Tile	NE storage closet	4-9% Asbestos
FT-3	18060406.11	Floor Tile	Office storage closet	4-9% Asbestos
SI-1	18060406.12	Spray Insulation	North warehouse south wall west end	No Asbestos Detected
SI-2	18060406.13	Spray Insulation	North warehouse south wall east end	No Asbestos Detected
SI-3	18060406.14	Spray Insulation	North warehouse north wall center	No Asbestos Detected





Re: 3915 McKinney Project ID 18060406

### **SURVEY LIMITATIONS**

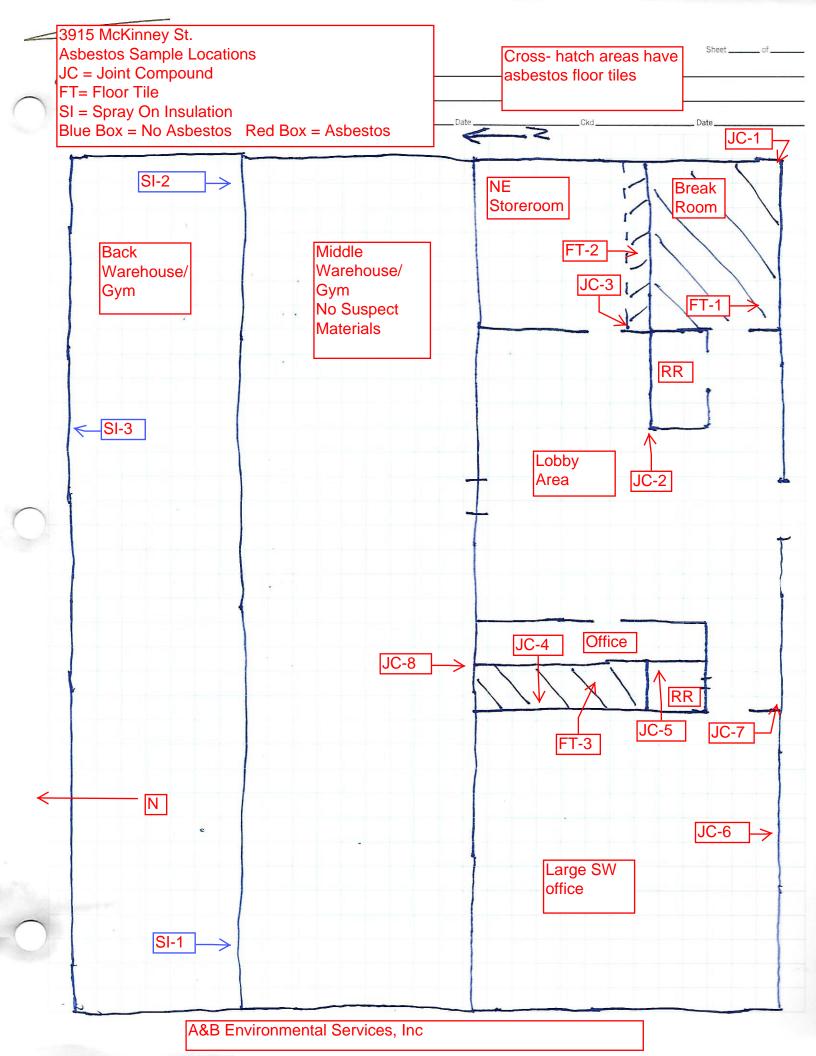
The survey performed on the subject property was a limited scope survey designed to identify the major occurrences of ACM in the areas specified. This limited survey used reasonable methods to locate and identify visible occurrences of ACM in the areas indicated. This report does not and cannot guarantee that additional ACM is not present. This survey was limited to accessible areas in the areas specified. Areas such as, but not limited to, the roof, inaccessible rooms or units, inside the walls and beneath the existing flooring, including carpeting and multi-layered tile and/or linoleum, are specifically excluded from the scope of this survey. The materials were sampled in accordance with State requirements for inspection of interior areas. If, during renovation or demolition activities previously undiscovered suspect materials are found, work in that area must immediately cease until the material can be checked by a DSHS licensed inspector.

The analytical results pertain only to the samples analyzed. A&B Labs assumes no responsibility for any subsequent use or interpretations of these analytical results. If you have any questions or need additional information please contact us at 713-453-6060 (office) or my cell 281-250-5181.

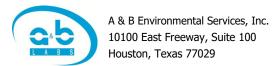
Sincerely,

Robert L. Voorhies

DSHS Asbestos Consultant License # 10-5524 expiration date 4/9/2020



### LABORATORY ANALYSIS REPORT



A&B Job ID: 18060406 Report Date: 6/14/2018

Total No of Pages: 6

NVLAP Lab Code: 101793-0 TDSHS LICENSE #: 30-0080

ProjectName: 3915 McKinney Houston, TX

Client: Weston Solutions P.O.#.: 0092142

Contact : Dawn Denham Sample Collected By : R.L. Voorhies

Address: 5599 San Felipe Suite 700 Date Received: 06/07/2018

Houston, Texas 77056 Sample Received By: AHall

Analysis by EPA Method 600/R-93/116 or 40 CFR, Part 763, Subpart F as appropriate. Components of non-homogenous or layered materials are analyzed separately and reported individually if asbestos is found in one or more layers or components. Analysis of vinyl floor tile and other resinously bound materials using these methods may yield false negative results. The Client may consider confirmation of negative results on these materials by TEM analysis. Fiber quantification is based on calibrated visual estimation. State regulations prohibit classifying asbestos containing materials as having 1% or less unless verified by point count. The Client should consider additional quantification by point count for friable materials containing 1-3% asbestos. These results pertain only to the items tested. This report may not be reproduced, except in full, without the written permission of A & B Environmental. The report must not be used by the Client to claim product endorsement by NVLAP or any agency of the U.S. Government. All samples are assumed to be in acceptable condition unless otherwise noted.

### A & B Labs has analyzed the following samples . . .

Your Sample ID	<b>Asbestos Detected</b>	Result	A&B Job Sample ID
WT/JC-1	Yes	Chrysotile 4-9%	18060406.01.A
WT/JC-2	Yes	Chrysotile 4-9%	18060406.02.A
WT/JC-3	Yes	Chrysotile 4-9%	18060406.03.A
WT/JC-4	Yes	Chrysotile 4-9%	18060406.04.A
WT/JC-5	Yes	Chrysotile 4-9%	18060406.05.A
WT/JC-6	Yes	Chrysotile 4-9%	18060406.06.A
WT/JC-7	Yes	Chrysotile 4-9%	18060406.07.A
WT/JC-8	Yes	Chrysotile 4-9%	18060406.08.A
FT-1	Yes	Chrysotile 4-9%	18060406.09.A
FT-2	Yes	Chrysotile 4-9%	18060406.10.A
FT-3	Yes	Chrysotile 4-9%	18060406.11.A
SI-1	No		18060406.12.A
SI-2	No		18060406.13.A
SI-3	No		18060406.14.A

Thank you for choosing A & B Labs.

Title:

ausm Hugus

Project Manager

Approved By: Alisha Hughes Analyst:

Phone:713-453-6060 www.ablabs.com

Page 1 of 6

### TEST REPORT FOR BULK ASBESTOS BY PLM

Date: 06/14/2018



A&B Job ID 18060406

Client Name: Weston Solutions Date Received: 06/07/2018
Project 3915 McKinney Houston, TX Date Analyzed: 06/14/2018

Name: Analyst Initial: HA

A&B Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
18060406.01	Wall Texture / J. Compound Granular	Yes	Chrysotile 4-9%		Binder Carbonate
18060406.01.A	Homogeneous				Mica
NT/JC-1	Tan/White				Paint
ayer % of Total :100%					
18060406.02	Wall Texture / J. Compound	Yes	Chrysotile 4-9%		Binder
18060406.02.A	Granular Homogeneous				Carbonate Mica
WT/JC-2	Tan/Yellow				Paint
_ayer % of Total :100%					
18060406.03	Wall Texture / J. Compound	Yes	Chrysotile 4-9%		Binder
18060406.03.A	Granular Homogeneous			Carbonate Mica	
NT/JC-3	Tan/Yellow				Paint
_ayer % of Total :100%					
18060406.04	Wall Texture / J. Compound		Chrysotile 4-9%		Binder
18060406.04.A	Granular Homogeneous				Carbonate Mica
WT/JC-4	Yellow				Paint
_ayer % of Total :100%					
18060406.05	Wall Texture / J. Compound	Yes	Chrysotile 4-9%		Binder
18060406.05.A	Granular Homogeneous				Carbonate Mica
WT/JC-5	White/Yellow				Paint
_ayer % of Total :100%					
18060406.06	Wall Texture / J. Compound	Yes	Chrysotile 4-9%		Binder
18060406.06.A	Granular Homogeneous				Carbonate Mica
WT/JC-6	Tan/White				Paint
_ayer % of Total :100%					
18060406.07	Wall Texture / J. Compound	Yes	Chrysotile 4-9%		Binder
18060406.07.A	Granular Homogeneous				Carbonate Mica
NT/JC-7	Gray/Tan				Paint
_ayer % of Total :100%					

### TEST REPORT FOR BULK ASBESTOS BY PLM

Date: 06/14/2018



A&B Job ID 18060406

Client Name: Weston Solutions Date Received: 06/07/2018
Project 3915 McKinney Houston, TX Date Analyzed: 06/14/2018

Name: Analyst Initial: HA

A&B Sample ID Client Sample ID	Sample Description	Asbestos Detected	Asbestos Fibers	Other Fibers	Non - Fibrous Material
18060406.08 18060406.08.A WT/JC-8 Layer % of Total :100%	Wall Texture / J. Compound Fibrous/Granular Homogeneous Blue/Brown	Yes	Chrysotile 4-9%	Cellulose 11-50%	Binder Carbonate Mica Paint
18060406.09 18060406.09.A FT-1 Layer % of Total :100%	Floor Tile Granular/Vinyl Homogeneous Gray/Green	Yes	Chrysotile 4-9%		Binder Carbonate Glue Vinyl
18060406.10 18060406.10.A FT-2 Layer % of Total :100%	Floor Tile Granular/Vinyl Homogeneous Gray/Green/Yellow	Yes	Chrysotile 4-9%		Binder Carbonate Glue Vinyl
18060406.11 18060406.11.A FT-3 Layer % of Total :100%	Floor Tile Granular/Vinyl Homogeneous Gray/Green	Yes	Chrysotile 4-9%		Binder Carbonate Glue Vinyl
18060406.12 18060406.12.A SI-1 Layer % of Total :100%	Spray insulation Fibrous/Granular Homogeneous Black/Brown	No		Cellulose 51-90%	Binder Glue Minrl Frags Paint
18060406.13 18060406.13.A SI-2 Layer % of Total :100%	Spray insulation Fibrous/Granular Homogeneous Black/Brown	No		Cellulose 51-90%	Binder Glue Minrl Frags Paint
18060406.14 18060406.14.A SI-3 Layer % of Total :100%	Spray insulation Fibrous/Granular Homogeneous Black/Brown/Pink	No		Cellulose 51-90%	Binder Glue Minrl Frags Paint



# **Sample Condition Checklist**

A&B	JobID: <b>18060406</b>	Received :	/ed: <b>5:15PM</b>					
Clier	nt Name : Weston Solutions							
Tem	perature : 24.0°C	Sample pH: <b>n/a</b>						
Ther	mometer ID: <b>n/a</b>	pH Paper ID: <b>n/a</b>						
		Check Points				Yes	No	N/A
1.	Cooler seal present and signed.				Х			
2.	Sample(s) in a cooler.			Х				
3.	If yes, ice in cooler.				Х			
4.	Sample(s) received with chain-of-c		Х					
5.	5. C-O-C signed and dated.							
6.	6. Sample(s) received with signed sample custody seal.							
7.	7. Sample containers arrived intact. (If no comment).							
8.	Matrix Water Soil Liqu	d Sludge Solid Cassette	Tube	Bulk	Badge	Food	Other	
<u> </u>				<b>V</b>				
9.	Sample(s) were received in approp	ate container(s).				Х		
10.	Sample(s) were received with prop	r preservative						Х
11.	All samples were logged or labeled					Х		
12.	Sample ID labels match C-O-C ID's					Х		
13.	Bottle count on C-O-C matches bot	es found.				Х		
14.	Sample volume is sufficient for ana	ses requested.				Х		
15.	Samples were received within the I	ld time.				Х		
16.	VOA vials completely filled.							Х
17.	17. Sample accepted.							
18	18 Has client been contacted about sub-out							Х
Com	ments : Include actions taken to res							
		ve discrepancies/ problem:						
		ve discrepancies/problem:						
		ve discrepancies/problem:						

Received by: AHall Check in by/date: AHall / 06/08/2018

Phone: 713-453-6060 www.ablabs.com

## ASBESTOS BULK SAMPLE - CHAIN -OF-CUSTODY

A & B Environmental Services, Inc 10100 I-10 East Freeway Suite 100 Houston TX 77029 713-453-6060 Fax 713-453-6091

Date of Inspection: 6/7/2018

Turnaround: 5 Day

Send Report To:

Weston Solutions

Address:

5599 San Felipe, Suite 700 Houston TX 77056

Phone:

713-985-6610

email: voorhiesrlv@aol.com

Person to Contact: Dawn Denham

Dawn.Denham@WestonSolutions.com

Project Name/Number: 3915 McKinney Houston TX

Inspector:

R. L. Voorhies

Inspector's License #: 10-5524

18040406 Laboratory batch ID identification number: Location Lab ID# Type Sample # Wall Texture/Joint Kitchen SE by window 011 WT/JC-1 Compound Wall Texture/Joint Corner of east restroom 02A WT/JC-2 Compound Wall Texture/Joint NE storage room SW corner 03A WT/JC-3 Compound 3 Wall Texture/Joint 19A Office closet west wall WT/JC-4 Compound Wall Texture/Joint OSA west restroom east wall WT/JC-5 5 Compound Wall Texture/Joint AV() Large SW office S wall by window WT/JC-6 Compound 6 Wall Texture/Joint Lobby SW by door to large office ()7A WT/JC-7 Compound Office enclosure exterior north wal in Wall Texture/Joint 08A WT/JC-8 middle warehouse Compound 8 19A Kitchen Floor Tile FT-1 9 (O A NE storage closet Floor Tile FT-2 10 Office storage closet Floor Tile FT-3 11 North warehouse south wall west end Spray Insulation SI-1

Relinquished By:

Accepted By:

12

Date: 6/7/18 17:15

Date: <u>U.1.18@ 17.15</u>

# ASBESTOS BULK SAMPLE - CHAIN -OF-CUSTODY

A & B Environmental Services, Inc 10100 I-10 East Freeway Suite 100 Houston TX 77029 713-453-6060 Fax 713-453-6091

Date of Inspection:	<u>6/7/2018</u>

Turnaround: 5 Day

Send Report To:

Weston Solutions

Address:

Inspector:

Accepted By:

5599 San Felipe, Suite 700 Houston TX 77056

Phone:

713-985-6610

email: voorhiesrlv@aol.com

Person to Contact: <u>Dawn Denham</u>

Dawn.Denham@WestonSolutions.com

Project Name/Number: 3915 McKinney Houston TX

R. L. Voorhies

Inspector's License #: 10-5524

8060404 Laboratory batch ID identification number: Location Lab ID# Type Sample # North warehouse south wall east end 3A Spray Insulation SI-2 13 4 14 A North warehouse north wall center Spray Insulation 14 2 SI-3 3 6 8 9 10 11 12 Relinquished By: Date: 47.18 @ 17.15



A & B Environmental Services, Inc.

Re: 3915 McKinney Project ID 18060405

June 16, 2018

Weston Solutions 5999 San Felipe Suite 700 Houston TX 77056 Attn: Dawn Denham

Re: LIMITED PAINT SAMPLING – 3915 MCKINNEY ST HOUSTON TX

The following is your final report of the limited sampling for paint of the commercial building located at 3915 McKinney St in Houston, TX. The inspection was conducted on June 7, 2018 by Robert L. Voorhies. A total of 6 paint samples were collected and analyzed for Lead content per the Clients instructions. Mr. Voorhies is employed by A & B Environmental Services, Inc., a DSHS licensed Asbestos Consulting Agency (DSHS license # 10-0094).

The inspection was done in conjunction with a Phase 1 Environmental Site Assessment done by Weston Solutions. The inspection was limited in scope and the number of samples to be collected. The intent was to determine if significant amounts of lead containing paint materials are likely to be present. It was not intended to identify all areas of lead paint or provide estimates of quantities. It may not be used as a Lead Paint inspection where required.

The paint samples were analyzed by A&B Labs in their facility at 10100 I-10 East Suite 100 in Houston, Texas using EPA Method SW-846 6010C, analysis by ICP AES. A&B Labs is accredited by the State of Texas under NELAC and by the AIHA for lead analysis.

This limited sampling was to provide information to the Client and was not intended to meet the requirements of current State and/or EPA lead inspection requirements.



Re: 3915 McKinney
Project ID 18060405

A & B Environmental Services, Inc.

### **FINDINGS**

The attached laboratory report shows the following results for each sample.

Sample # Location		Color	Result
LP-1	Office kitchen S wall	Paint white	<6 mg/kg
LP-2	Office NE storage room SW corner	Paint white	<4.8 mg/kg
LP-3	Large SW office S wall	Paint white	<4 mg/kg
LP-4	Office enclosure exterior wall south wall of middle warehouse	Paint blue	15.8 mg/kg
LP-5	Middle warehouse north side metal wall	Paint white	25.3 mg/kg
LP-6	North warehouse exposed steel structure	Paint Red	161 mg/kg

The limit for lead in paint currently sold in the US is 600 ppm, which many times higher than the highest lead concentration found in these samples. Paint with this level of lead could legally be bought today at any home improvement store.

The legal definition of lead based paint of paint containing more than 5,000 mg/kg of lead.

Based on the limited sampling it is unlikely that significant amounts of lead based paint are present in the areas where samples were collected.

A & B Environmental Services, Inc.

Re: 3915 McKinney Project ID 18060405

### **SURVEY LIMITATIONS**

The paint sampling on the subject property was a limited scope survey designed to identify the major occurrences of lead paint inside the areas and materials specified as directed by the Client. This limited survey made a no attempt to locate and identify all occurrences of lead paint inside or on the exterior of the building, and does not and cannot guarantee that additional lead paint is not present.

The investigation was requested to determine if lead containing paint is likely to be present in the areas specified for remodeling by the Client. Because these are buildings where children will be present during renovation activities they may be regulated under the EPA lead guidelines. OSHA regulations may apply depending on the methods used to remove any lead containing paint. This limited sampling was to provide information to the Client and was not intended to meet the requirements of current State and/or EPA lead inspection requirements.

The analytical results pertain only to the samples analyzed. A & B Environmental Services assumes no responsibility for any subsequent use or interpretations of these analytical results. If you have any questions or need additional information please contact us at 713-435-6060.

Sincerely,

Robert L. Voorhies PG

DSHS Asbestos Consultant License # 10-5524, Exp. 4/9/20

## **Laboratory Analysis Report**

Job ID: 18060405



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

# Client Project Name : 3915 McKinney, Houston, TX

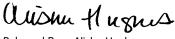
Report To: Client Name: Weston Solutions P.O.#.:

Attn: Dawn Denham Sample Collected By: R.L. Voorhies Client Address: 5599 San Felipe Suite 700 Date Collected: 06/07/18

City, State, Zip: Houston, Texas, 77056

### A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID		
LP-1	Paint Chips	18060405.01		
LP-2	Paint Chips	18060405.02		
LP-3	Paint Chips	18060405.03		
LP-4	Paint Chips	18060405.04		
LP-5	Paint Chips	18060405.05		
LP-6	Paint Chips	18060405.06		



Released By: Alisha Hughes
Title: Project Manager
Date: 6/13/2018



This Laboratory is NELAP ( T104704213-18-17) accredited. Effective: 4/1/2018; Expires: 3/31/2019

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

Date Received: 06/07/2018 17:15

Total Number of Pages:



Job ID: 18060405

CLIENT Name: Weston Solutions ATTN: Dawn Denham PROJECT Name: 3915 McKinney, Houston, TX Method ClientSampleID Result Units Matrix D.F **Rpt Limit** Reg Collection **Analysis** Analyst SampleID **DateTime** Parameter Limit **DateTime** LP-1 **Total Metals** BRL 3 SW-846 6010C Lead 6 06/07/18 06/12/18 17:50 CAS 18060405.01 mg/Kg Paint Chips LP-2 **Total Metals** SW-846 6010C Lead BRL 2.4 4.8 CAS 18060405.02 mg/Kg Paint Chips 06/07/18 06/12/18 17:54 LP-3 **Total Metals** SW-846 6010C Lead BRL mg/Kg 2 CAS 18060405.03 Paint Chips 4 06/07/18 06/12/18 17:57 LP-4 **Total Metals** SW-846 6010C Lead 15.8 mg/Kg Paint Chips 1 2 06/07/18 06/12/18 18:01 CAS 18060405.04 LP-5 **Total Metals** SW-846 6010C 25.3 12 24 06/07/18 CAS Lead mg/Kg Paint Chips 06/12/18 18:05 18060405.05 LP-6 **Total Metals** SW-846 6010C Lead 161.0 mg/Kg 20 40 06/07/18 06/12/18 18:09 CAS 18060405.06

Paint Chips

Date: 6/13/2018



### LABORATORY QUALITY CONTROL CERTIFICATE

A&B Job ID: 18060405 Date: 6/13/2018

QCType: LCS and LCSD											
Parameter	Method	Spike Added	LCS Result	LCSD Result	LCS	LCSD Rec %	RPD	% RPD CLimits	% Rec CLimits	OCBatchID	Qual
Lead	SW-846 6010C	6870	6880	9740	100	142	34.5	20	70-130	Qb18061262	L1,R1

QCType: Method Blank									
Parameter	Method	CAS #	Result	Units	D.F.	Rpt Limit	QCBatch	ID	Qual
Lead	SW-846 6010C	7439-92-1	BRL	mg/Kg	1	2	Qb18061	262	

### LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 18060405 Date: 6/13/2018

### General Term Definition

Back-WtBack WeightPost-WtPost WeightBRLBelow Reporting Limitppmparts per millioncfucolony-forming unitsPre-WtPrevious Weight

Conc. Concentration Q Qualifier

D.F. Dilution Factor RegLimit Regulatory Limit

Front-Wt Front Weight RPD Relative Percent Difference LCS Laboratory Check Standard RptLimit Reporting Limit

LCSD Laboratory Check Standard Duplicate SDL Sample Detection Limit

MS Matrix Spike surr Surrogate
MSD Matrix Spike Duplicate T Time

MW Molecular Weight TNTC Too numerous to count

J Estimation. Below calibration range but above MDL

Qualifier Definition

L1 Associated LCS and/or LCSD recovery is above acceptance limits for flagged analyte. Bias may be high.

R1 RPD exceeds control limits.

# **LEAD PAINT SAMPLE - CHAIN -OF-CUSTODY**

A & B Environmental Services, Inc 10100 I-10 East Freeway Suite 100 Houston TX 77029 713-453-6060 Fax 713-453-6091

Date of Inspection: 6/7/2018

Turnaround: 5 DAY

Send Report To:

Weston Solutions, Inc.

Address:

5599 San Felipe Suite 700 Houston TX 77056

Phone:

713-985-6610

email: dawn.denham@westonsolutions.com

Person to Contact: Dawn Denham

voorhiesrlv@aol.com

Project: 3915 McKinney Houston TX

Inspector:

R. L. Voorhies/A&B Labs

Inspector's License #: 10-5524

18060405 Laboratory batch ID identification number: Location Lab ID# Type Sample # Office kitchen S wall Paint white ()I*\* LP-1 Office NE storage room SW corner Paint white LP-2 Large SW office S wall Paint white LP-3 3 Office enclosure exterior wall south wall of 04A Paint blue LP-4 middle warehouse 05A Middle warehouse north side metal wall Paint white LP-5 5 04A North warehouse exposed steel structure Paint Red LP-6 6 8 9 10 11 12

Relinquished By: Accepted By:

Date: 6/7/18 17:15 Date: 47180 17:15



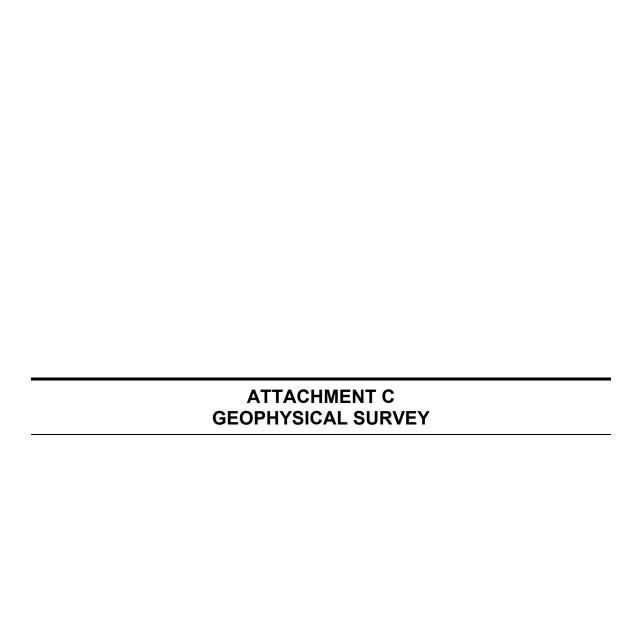
Received by: AHall

# **Sample Condition Checklist**

A&B	JobID: <b>18060405</b> Date Received: <b>06/07/2018</b> Time Received: <b>5:</b> 3	: <b>5:15PM</b>			
Clien	t Name : Weston Solutions				
Tem	perature : 24.0°C Sample pH : n/a				
Ther	mometer ID : <b>n/a</b> pH Paper ID : <b>n/a</b>				
	Check Points	Yes	No	N/A	
1.	Cooler seal present and signed.			Х	
2.	Sample(s) in a cooler.		Χ		
3.	If yes, ice in cooler.			Х	
4.	Sample(s) received with chain-of-custody.	Х			
5.	C-O-C signed and dated.	Х			
6.	Sample(s) received with signed sample custody seal.		Χ		
7.	Sample containers arrived intact. (If no comment).	Х			
8.	Matrix Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Fo	ood	Oth	_	
<b>0</b> .			~	ı	
9.	Sample(s) were received in appropriate container(s).	Х			
10.	Sample(s) were received with proper preservative			Х	
11.	All samples were logged or labeled.	Х			
12.	Sample ID labels match C-O-C ID's	Х			
13.	Bottle count on C-O-C matches bottles found.	Х			
14.	Sample volume is sufficient for analyses requested.	Х			
15.	Samples were received within the hold time.	Х			
16.	VOA vials completely filled.			Х	
17.	Sample accepted.	Х			
18	Has client been contacted about sub-out			Х	
	ments : Include actions taken to resolve discrepancies/problem:				
Other:	=Paint Chips.				

Phone: 713-453-6060 www.ablabs.com

Check in by/date: AHall / 06/08/2018





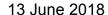


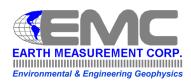
# Geophysical Subsurface Investigation Survey

# 3915 MCKINNEY STREET HOUSTON, TEXAS

PERFORMED BY: THE EARTH MEASUREMENT CORP. JUNE, 2018

Professionally solving subsurface questions





Ms. Dawn A. Denham *Weston Solutions*5599 San Felipe Street, Ste.700
Houston, Texas 77056
Tel: 713.985.6600

Re: GEOPHYSICAL INVESTIGATION SURVEY 3915 McKinney Street-Houston, Texas

EMC Project # WS061807

Dear Ms. Denham:

This report describes the results of a geophysical investigation survey performed by the Earth Measurement Corp. (**EMC**) at your site located at 3915 McKinney Street in Houston, Texas.

#### **SCOPE**

The scope of this project was to attempt to locate any possible Underground Storage Tanks (UST's), pipelines/conduits or other anomalous areas that may exist within the boundaries defined for this site.

#### **ACQUISITION**

**EMC** fielded a four-person crew for the acquisition phase of this project: Operations Manage Harold Fulton, Cartographer Chance Austin and Equipment Operators Curtis Klinge and Aaron Burton.

### **EQUIPMENT**

The instrument used at this site was a Geophysical Survey Systems Inc. (GSSI), Subsurface Interface Radar System 4000 (SIR-4000). A 400 MHz antenna was deemed to be the best choice for this site based on desired investigation depth and general site conditions. The SIR-4000 utilizes impulse radar technology to obtain a continuous, high-resolution profile of the subsurface. The radar signal transmitted into the subsurface is produced by electrically discharging a pulse of electromagnetic energy from a special antenna. The transmitted pulse travels through the subsurface until it reaches a soil interface or an embedded object. Then, depending on the electrical characteristics of the interface or object, a portion of the transmitted pulse is reflected back to the surface, where it is picked up by the receiver section of the antenna. The received signal is processed and a real-time replica of the information is displayed. Depth of subsurface penetration is directly dependent upon the conductivity of the medium.

The second instrument that was used is a Geonics Electromagnetic Meter, Model EM-61 MK2 (EM). The EM-61 MK2 uses induced-pulse electric fields to find buried ferrous objects while minimizing the response of host material. Stated another way, the EM-61 is a metal detector capable of measuring the amplitude response of buried metals as

well as the lack of amplitude associated with non-metallic objects. The depth of penetration for this instrument is approximately ten feet (10').

The third instrument that was be used was the RadioMetrics Model RD-8000 locator (Induction). The RD-8000 is designed to locate buried pipes, lines, and cables. Several frequencies and modes of operation are available to suit specific locating needs.

#### INTERPRETATION

A thorough examination of all the geophysical data revealed the following:

There were nine boring locations that were cleared by the **EMC** acquisition team. All the boring locations except for SB-03 and SB-05 were deemed clear of drilling hindrances. Both SB-03 and SB-05 were within five feet (5') of a found pipeline or utility.

There were a total of nine (9) pipelines/conduits located during the survey. These linear anomalies are shown on the Interpretive Map by solid red lines. No positive interpretation as to what might be causing the anomalies can be made. It is possible that there are waterlines, drain lines, electrical lines and possibly abandoned lines are located on the site.

There were also three (3) anomalous areas identified in the geophysical data and are depicted on the Interpretive Map by red-hatched areas. These anomalies are labeled A, B and C on the Interpretive Map and are listed in the Anomaly Table below with coordinates. Two (2) of these anomalies A and B were identified only in the GPR data set and anomaly C was located in both the GPR and EM data sets. The linear portion of anomaly C may be caused by a steel reinforced section of concrete that was noticeable at the site. The additional area of anomaly C is somewhat odd as it is angular and is noticeable deeper down in the GPR data.

Although none of these anomalies show a definitive geophysical signature that indicates that a UST may be present on the site. If additional information exists as to what activities may have gone on in the past a more accurate interpretation can be made.

Anomaly	Easting	Northing	Comments
Α	273741	3292617	This GPR anomaly could be an area of disturbed soils
В	273763	3292627	This GPR anomaly is in an area of past operations and may
			need further investigation
С	273824	3292591	The linear portion of this anomaly (EM data) may be the re-
			sult of steel reinforced concrete and the angular portion
			(GPR data) may be caused by subsurface drainage. Only a
			hypothesis.

<u>SB-01</u> Soil boring SB-01 was located inside the building. This location showed no interference from UST, pipelines or conduits for drilling activities.

<u>Please note:</u> Some explanation on the radar method seems in order at this point. The images produced by radar through the use of the GPR-SLICE software package, actually through any software are simply a visual presentation that there is a change in the dielectric property of the medium through which the radar energy is moving. When we arrive on a site to do a radar survey, we initially establish a set of gains that are optimal

for that particular site on that particular day. This is necessary due to the fact that a site's characteristics are constantly changing due primarily to moisture content of the soils or whatever medium we are examining. The radar is only going to show a relative change over the course of a survey line. The software will recognize changes in the strength of reflections from the subsurface and these changes are what the software uses to determine anomalous features within the survey area. The radar can make no interpretation as to what is causing the changes in density, i.e. strength of reflectors. That chore is left to humans with some foreknowledge and experience of what is occurring at a particular site. With some prior information and with the experience of looking at many of these types of situations a "Best Estimate" call has to be made. Please understand that in nearly any set of radar data, there are going to be anomalies and it would become a never ending task of trying to 'guess' what is going on in the subsurface, for that reason we always indicate that the only true method of determining the actual nature of an anomaly is through physical investigation.

#### **DELIVERABLES**

Included with this report are the following items:

- ♦ Site Map
- ◆ Electromagnetic Map
- Ground Penetrating Radar Map
- ♦ Interpretive Map
- Equipment Descriptions

#### **STATEMENT**

Ground Penetrating Radar, Electromagnetics and RadioDetection are not definitive measures in obstructed environments and should not be the only methods used to define the boundaries of sub-surface anomalies. The interpretation of the processed data describes the anomalies as closely as possible. The survey results described in this report and illustrated on the Interpretive Maps represent theories supported by the evidence of the data collected. Based on experience and expertise in the field, **EMC** has every confidence in the results.

Please be advised that original project information will be held in **EMC**'s offices for a period of six months. After that time, the information will be destroyed. **EMC** personnel are always ready to answer any questions about this project. Please do not hesitate to call.

Thank you for this opportunity.

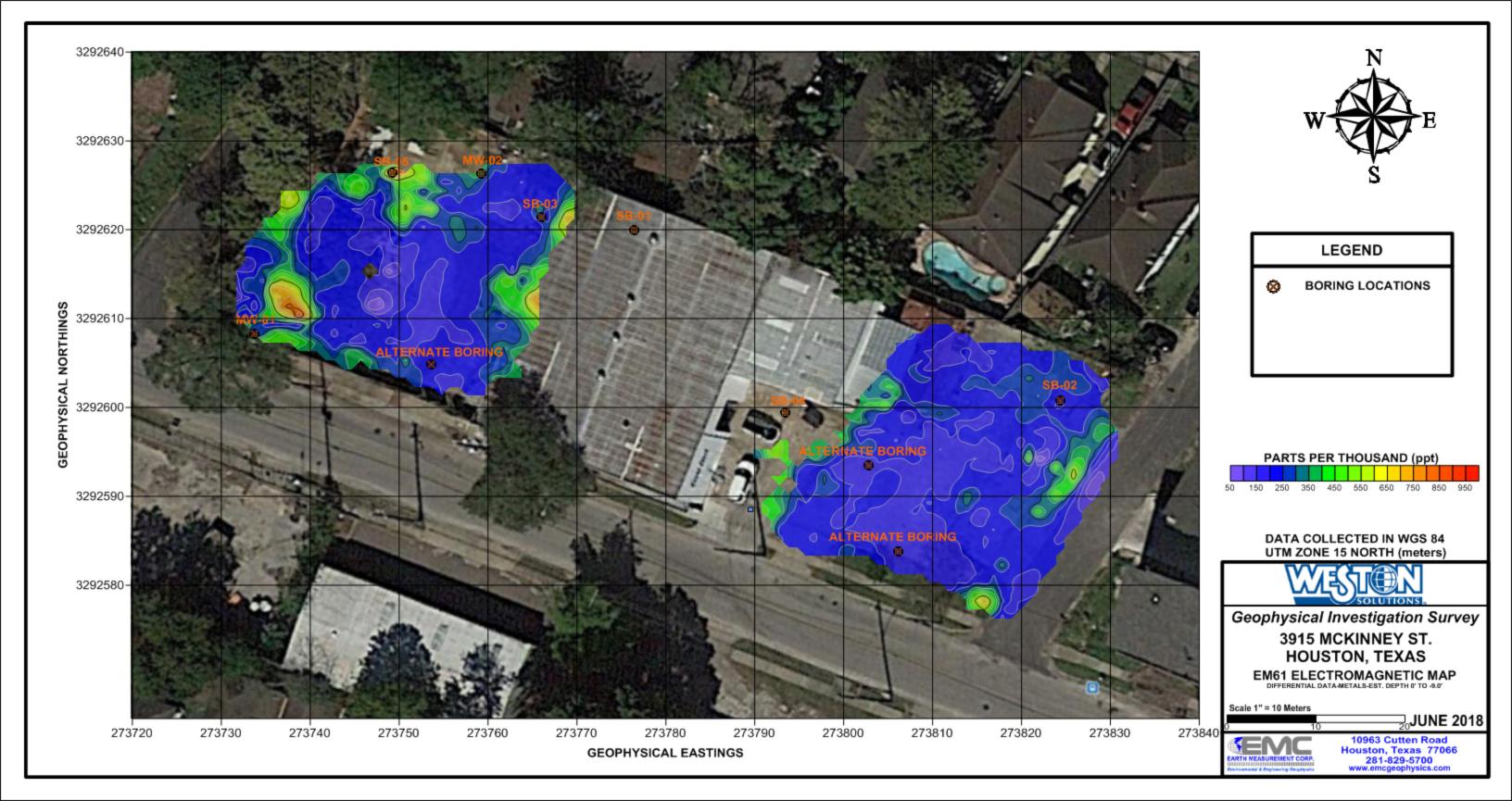
Sincerely,.

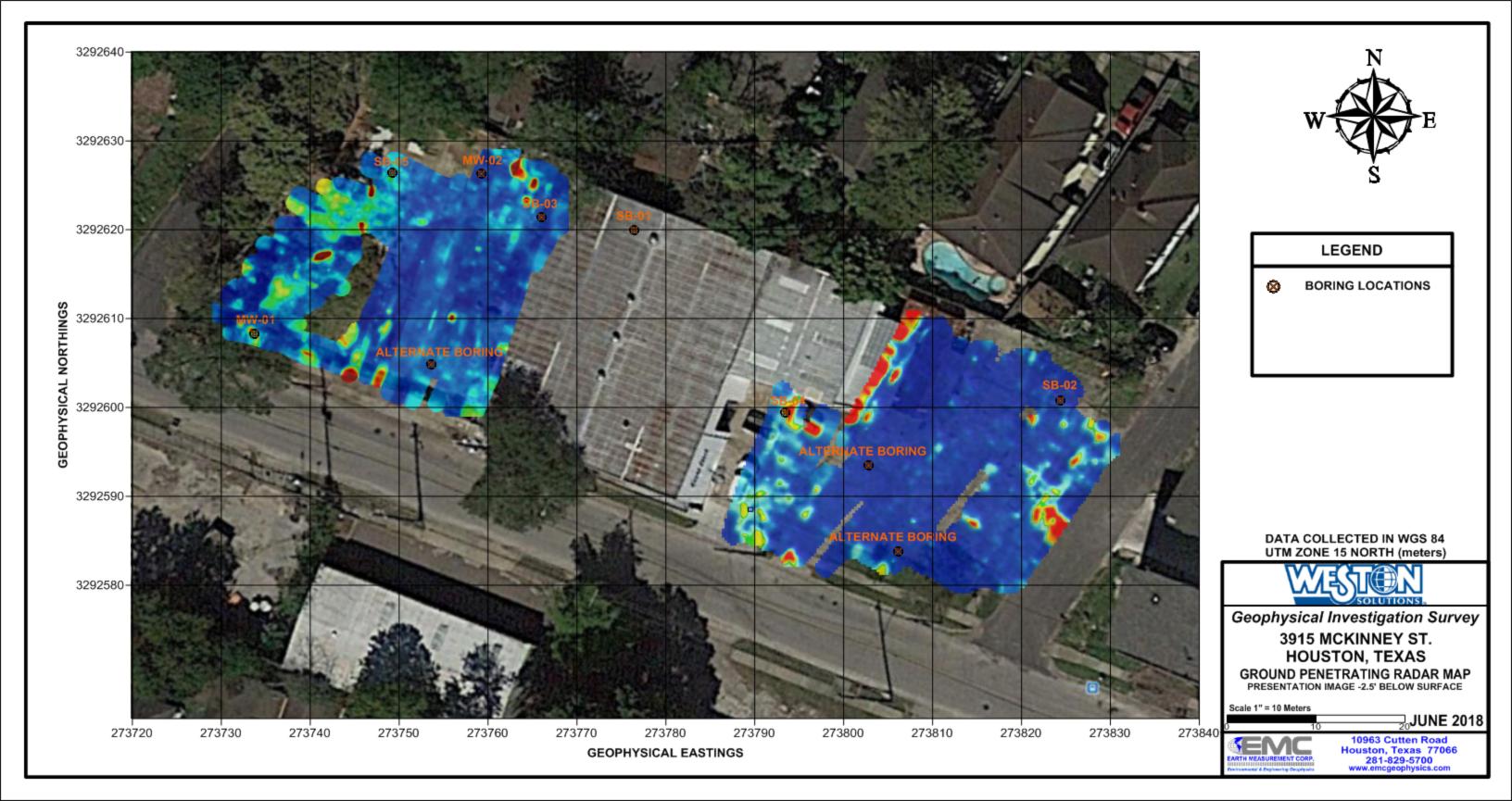


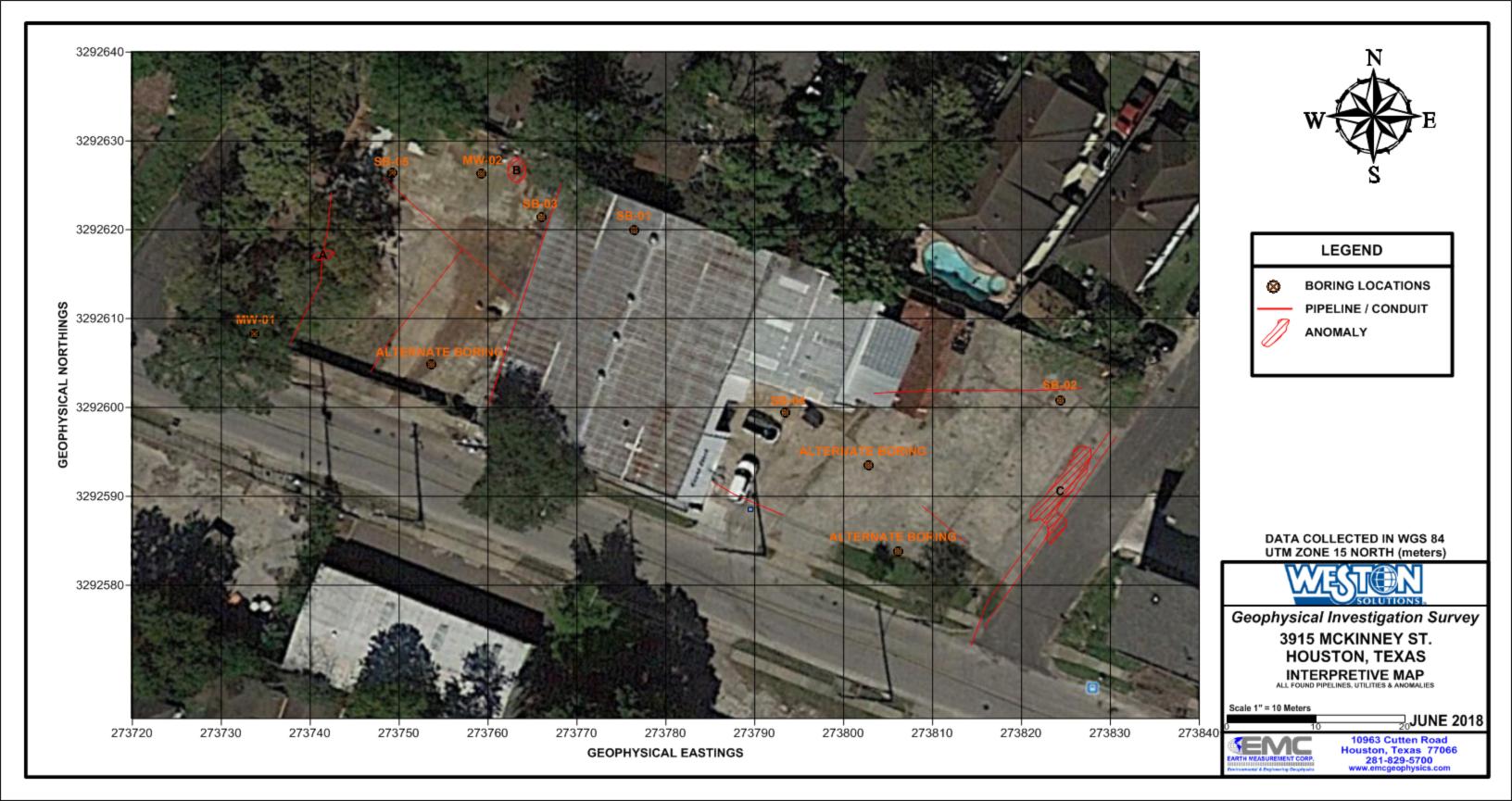
Joe M. Austin

State of Texas Professional Geoscientist

Geophysics – License #5336









# GEONICS EM-61 Electromagnetic Meter

The EM-61 is a time domain electromagnetic device that is used to find buried ferrous objects by inducing electric current beneath the surface and measuring the voltage response. The EM-61 can be used in a variety of soils and surfaces because it transmits 150 EM pulses per second, and measures target response during the off-time to minimize the response of the surrounding medium. A dual transmitter system allows for target depth estimation, while eliminating undesirable responses due to surface clutter.

Its higher power and larger coils allow for larger and deeper targets than other electromagnetic systems. The EM-61 can be applied successfully to find underground storage tanks, buried drums, pipelines, hazardous metal waste, and unexploded ordnance. The high resolution of this instrument combined with its ability to eliminate noise make the EM-61 an ideal tool for locating ferrous objects.





### GEOPHYSICAL SURVEY SYSTEMS INC. — SIR SYSTEM SIR-4000

## **Ground Penetrating Radar**

The Geophysical Survey Systems Inc., Subsurface Interface Radar System SIR-4000 (SIR-3000) instrument utilizes impulse radar technology to obtain a continuous, high-resolution profile of the subsurface. The radar signal transmitted into the subsurface is produced by electrically discharging a pulse of electromagnetic energy from a special antenna. The transmitted pulse travels through the subsurface until it reaches a soil interface or an embedded object. Then, depending on the electrical characteristics of the interface or object, a portion of the transmitted pulse is reflected back to the surface where it is picked up by the receiver section of the antenna. The received signal is processed and a real-time replica of the information is displayed. Depth of subsurface penetration is directly dependent upon the conductivity of the soil.

Several types of antennas are available for use with the SIR Ground Penetrating Radar (GPR) system. The defining characteristic of these antennas is their operating frequency. The higher the antenna's operating frequency, the smaller the antenna's size and pulse loop, the greater the data resolution, and the shallower the depth-of-penetration. An 80 MHz antenna is the practical minimum frequency while 2500 MHz is the practical maximum.



For more detailed information on all of our services, please visit our website at: www.emcgeophysics.com



# Radiodetection RD 8000/RD 8000 Transmitter

## **Locating Tool**

The RD8000 locating system is a newly designed utility pipe, cable, and line locating system. Featuring 18 frequencies, circuit breakers, and left-right arrows, Peak & Null mode, Compass, True depth as well as a complete digital platform the RD8000 is versatile, reliable and durable.

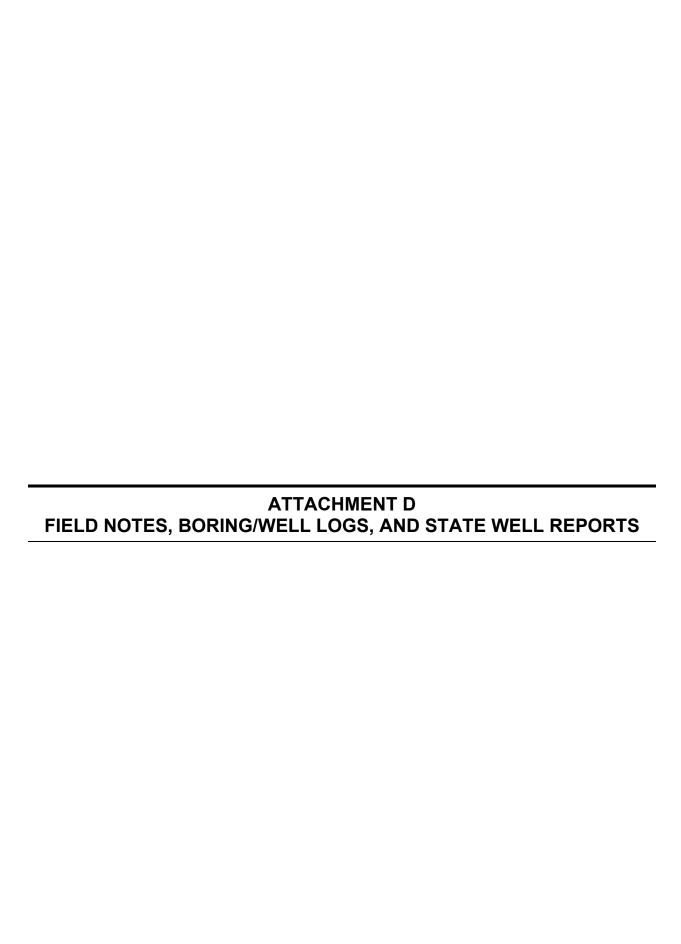
The Radiodetection RD8000 receiver is designed to locate buried pipes, lines, and cables. Several frequencies and modes of operation are available to suit specific locating needs. Available passive modes include: 50Hz, and 60 Hz power, radio, and 31 kHz CATV. Available active modes include ELF (98/128) Hz, 577 Hz, 512 Hz, 640 Hz, 870 Hz, 940 Hz, 8 kHz, 33 kHz, 65 kHz, 83 kHz, 131 kHz and 200 kHz for use with Radiodetection transmitters.

The Radiodetection RD8000 transmitter is designed to place signals on target lines. It can be configured to send 512 Hz, 640 Hz, 8 kHz, 33 kHz. It places a signal on the line through a direct connection, induction clamping, or broadcast modes.





For more detailed information on all of our services, please visit our website at: <a href="https://www.emcgeophysics.com">www.emcgeophysics.com</a>



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# 3915 Mckinney Phase II



Rite in the Rain

ALL-WEATHER

JOURNAL

№391FX

01723.062.007

Stur dot: 6/7/18

26/7/18 Mckinney Goophysical+GBP/Acm Surv. 0800 Rachel Omerta (RD) - Weston arrives at Weston warehouse to pick up H+s equip. 0808 Ro departs warehouse for site - 100 0875 Ro arrives on-site. Dawn Denham (DD)-Western already ensite tout and EMC crew on-site - to 0830 Man boss (Rb) - Western arrives onsite. 0835 DD holds tailgate 4.5 meeting w/ EMC. Topics include: noute to hospital, heat stress / hydration, traffic hazards and PPE, boological hazards, presence of dogs on site. Full reviews and signs HASP See HASP for further details 0845 Lane voorheis - ArB arrives on site. DD briets him on His tipics labore + UBP/ACM awareness). ATB reviews/1:gns HASP. 0850 A+B begins UBP/AUM SURVEY; FMC begins size itsit - western 0900 Bear Schilgen - terant / Fitness consul owner arrives on lite. Notes trormer plating bilding area has been covered with a large shipping containers. Had to snift MW-02 believe to to avoid shipping contained to

Lontinued 6/7/18 Morinney Goo + USP/ACM SURVEY DO, eo, 300 + 58-01 location moved from Frashed Binger Storage Area to Polishing | Pressing area linsal bilding, Not originalist since historical autivities conducted here. - MW-DI moved SW due to free overhead + 5B-03 location selected in transfel area between Polishing Pressing awa and to ones plating building. To \$ Staining present oxygowed & SB-03 \* SB-04 Togetion selected in point drainage area from humper I hop. + 50-05 location relected 3 of shipping containers in Former Plating area. -\* SB-02 location not moved to FINE SOW includes conducting geophysical survey of entire site, 600s locations of MW's + SB's, and utility locating. 1030 A+10 compretes UBP/ How sivey, deputs site. 1115 Enc completes geophysical sirvey. Enc 1145 Ro and Rt arrive back at weston wavehouse + veturn equipment - Es 1215 to and the depart ware house -Ind of wy day

01723.062.007.0002 4125/18 ucking was eveloping to 3 26/25/18 McKinney well Developing to 0830 Rachel Omerta (20) Weston arrives 1035 Ro begins developing wwi - no at warehouse and begins loading 1056 RD completes developing MW-1. equipment into mull to See der. datas veet for details. 0916 RO departs warehouse for site -Removed 55 gal (22 mai vol.) and parameters stabilized 2 Starting mileage: 134283 viles - 10 10923 Stop En route to purchase distilled 1145 Ro begins developing own-2 to water for decon and ite for drinks. idocs to completes developing out-a furnish 55 gal (20 ver) sil. see dev. destar 0942 RD arrives onsite at Mckinney To 0951 RD reviews HASP and H+5 topics Utopics Sheet for sher details to 1235 Ro moves 55 galdrum trom MW-2 include: cocs, route to hospital, heavy lifting, heat stress, working alone, PPE to dum studing area to 1253 Ro offload new 55-gal dwar to 1000 Ro calibrate House USZ water quality meter (FW ) w/ standard sol'n: dum staging area. Otopose of INW pH: 4.01 4.01 Sp. Land: 4.50 m5/cm 4.50 n5/cm waster from delon and projects in new drym. Note: generated 3 drym I DW WORK This event 12 - full 1-DO: 0.0 NTV 1.8 NTV
Torb: 100.07. 7-40 mg/L/99.57.
029: 240 mJ 241 mJ contains ~ (e gal). Fill out and affid non hat would to each to 1312 Ro departs site for warehouse to to 15 RO set up decontamination station by 1332 Ro arrives back at ware house to Tabeling 3 new poly gales + lids Freding mileage: 134300 miles "unioad equipment from there " O wash a wine 1 3 winse 2 adding 1435 Depart warehouse. - to 2 gal distilled water + liquinox to wash, will devan all non-disposante early. End of log day per well and we new promp tribing permy!

01723.062 007 000 2 6/26/18 molinney 6w Sampling to 5 4 6/21/18 MCK noly OW Sampling to 0845 Rachel Omerza Clos - wester am ves at 1100 PCPA metals/mexcy/lintitend [run]+ warehouse and begin walking equipment. filtered war ton hold), hex. chomium 0934 RD departs warehouse for site ---( Gitered 10 um + unfiltered [no both) Starting mileage: 134300 mus - 10 and eyanicle. 0943 20 stop en rouse to purchase trelier, Samples immediately placed on ice in laborations applied sample wolf distilled water for decon - to 1015 RO arrives on site. Leviews HADD + fetro way 1130 Po place trip blank [TB-2] in 475 typics Same details as yesterday. cooler tor vocs 8200. Used interatory prepared 1030 RD review SOW and sumpling plan. trip Mank sippored by SOS stired @ PES 1052 RD calibrate Horiba USZ washir quality wi wstray sear, as ATB tailed to supply meter (CFW 23850) w/ standard solin. requested top blank pt: 4.00 4.00 1303 Po regin microperging MW-2 - Re 13:33 ha when low-21 Gw sample for 5p. Lond: 4.49 m 5/cm 451 m 5/cm
Ro: 100.07. 95.34/7.23 mg/c
TUID: 0.0 WTV 0.0 NTV VOLS 8260, RELA metals merang (6) Hered win con hold ) + intilled (con) hex chromat Childred town + unfiltred Coun off: aroms aroms northal), cyanide. Mso what depicate 1100 RD Set up devon. Station using 2 gal [MW-12] 5 multaneously wil three of 1303 fresh distilled water in each broker and fil same analytes as MW-2 minus cyanicle. liquinox in wash. will dean all 1420 RD collect freed blank (FB-2) for vols non-disposable equipment and we new 82100 using laborating grade deisnited tobing sprove lete per well - to water adjacent to MW-2 - 6 1111 RO vegin microproping NW-1 - to Romara 1333 Ro also collect topic volume from 1140 to whele MW-11 ow sample for MW-2 for vols, hea comming ecopy 11 BTEX 5260, THY 1005 PAHS LON hold), metals mercung for Molouso - 2 Rite in the Rain

01723.062.007.0002 6 6126/13 Mckinney ow sampling 1445 RD WHECK TIPW . S) Soil composite sample from 4 10w soil downs on site. for TUP RULA metals, TUP VOUS, TUP SVOLS, TPH, waniel -1450 Ro pertorm +podes final decon on all non-doposable egripment. Propose of 1000 warr from decon + purge in IPW water dum from developing. Final drym inventory. 4 - 1PW soil 1 - 10w (decorning augu(s)drim wintowns plastic wrap and ~ 25 gar deron warr. + 3 IPW water - 2 FMI (developing), 1 contains ~17 gal deconforge water. 1517 RO depart site for ATB lab 1530 lo arrive at AAB cab and return unused sample bottles and relinguish sample 1543 to depart into fir warehouse -1615 to arrives back at wavehour and inlouds equipment from truck Friding milage: 134332 miles 1650 RO doparto warehouse Rite in the Rain

# MONITOR WELL DEVELOPMENT FIELD DATA SHEET

SITE: McKinney Phase II Well Developing

WELL ID: MW-1

PROJECT NUMBER: <u>01723.062.007.0002</u>

DATE: 6/25/18

Casing Diameter  2"  4"	Screened Interval (ft, BGS) 15-35 W W-30	Stick Up Flush mount
Initial Total Depth (ft. BTOC)	Purge Equipment	Analytical Equipment
27.96 1.50ft	Water spout pump, new tubing	Horiba U52 water quality meter
Final Total Depth (ft. BTOC)	Development Method	I Well Volume (gal)
30.31 Semi-soft	Over pumping	2.45 (~2.5)
Static Water Level (ft. BTOC)	Time Purge Started	3 Well Volumes (gal)
12.61	1035	7.35 (~7.5)

Time	F	low Rate gal per	Well Volumes	Volume Purged gal	<b>pH</b> (+/- 0.2)	<b>Sp. Cond.</b> ms/cm <sup>e</sup> (+/- 3%)	Temp °C (+/- 0.5)	ORP niV	<b>DO</b> mg/L	Turb NTU (<10)	Appearance Clear – C Opaque – O Cloudy – Cl Grey – G Tan – T	Depth to Water ft. BTOC
1034	رب	JK	١	2.5	6.85	1.31	24.80	173	2.51	O un	OIT	N.M.
1037			2	5.0	4.79	1-36	2426	169	1-26	0.0	OTT	16.90
1039			Ч	10.0	4.75	1.34	23.94	lel	2.64	0.2.	OIT	16.93
loui			6	15.0	4.70	1.34	23.67	102	1.51	0.2.	OFT	16.95
1043			9	22.5	6.70	1.48	23.75	Me	1.22	0.2.	5.017	N.M
loule	()		12	30	6.67	1.55	23.67	(ol)	0.91	O.R.	0/1	17.03
1049			15	37.5	6.70	1.58	23:52	33	1.08	0.0.	att	17:14
1052			i&	45,0	4.64	1.52	27.60	28	0.71	0.6	OH	1694
1054			1920	57	4.63	1.54	23.62	26	0.55	0.4.	J.CIM	16.97
(055			21	52.5	663	1.55	23 W	24	0.87	585	CIM	16.98
1054	_	V	22	55	6-64	1.57	23.57	25	0.85	379	CILT	16.98
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							Jeg					

nd turbidity will be used to
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Hickey
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# MONITOR WELL DEVELOPMENT FIELD DATA SHEET

SITE: McKinney Phase II Well Developing

WELL ID: MW-2

PROJECT NUMBER: <u>01723.062.007.0002</u>

DATE: (0/25/18

Casing Diameter	Screened Interval (ft, BGS)  20 - 30	Stick Up Flush mount
Initial Total Depth (ft. BTOC)	Purge Equipment	Analytical Equipment
29.25 V. soft	Water spout pump, new tubing	Horiba U52 water quality meter
Final Total Depth (ft. BTOC)	Development Method	Well Volume (gal)
29.27 50-64	Over pumping	Dr a.70 (~2.35)
Static Water Level (ft, BTOC)	Time Purge Started	3 Well Volumes (gal)
12.32	1145	8.10 (-8.25)

Time	Flow Rate gal per min	Well Volumes	Volume Purged gal	<b>pH</b> (+/- 0.2)	Sp. Cond. ms/cm <sup>c</sup> (+/- 3%)	Temp °C (+/- 0,5)	ORP mV	DO mg/L	Turb NTU (<10)	Appearance Clear – C Opaque – O Cloudy – Cl Grey – G Tan – T	Depth to Water ft. BTOC
1146	~45	2.75	1	7.28	1.04	24.99	153	1.72	0.6	017	16.49
1148	1	5.5	2	7,17	0.950	24.10	124	1.20	0-K.	OH	16.78
1149		7.75	3	7.07	0.907	23.49	89	0.77	0.2.	OIT	16-69
1152		1450	6	7.00	0.884	3339	70	0.45	0.0.	Oft	16.10
1155		24.75	9	6.90	0.889	23.41	ley	0.51	0.0.	010	16.10
1058		33.0	19	6.95	0.867	23.28	68	0.58	897	OIT	16.38
1201		41.25	15	6.93	0.867	23:25	74	0.40	1940	JUIT	1640
1204		49.5	18	694	0.873	23.20	86	0.73	146	cl	1645
1205		52.25	19	6.92	0.868	23.14	87	0.45	115	U	16.45
vaole	7	550	20	6.92	0.869	23.17	87	0.98	991	U	1648
							201				
				Tha	1			_			
					of	log					
						$\cup$					

Comments: All above water quality parameters will be recorded, but determine stabilization.  1. L. = Over range that makes	
Level of PPE: D – Steel toed boots, affety glasses, nitrile gloves	Total Volume Purged: 55 gal ( 20 vell v
<b>Disposition of Purged Water:</b> Placed in new 55-gallon steel drum left on-site.	Sampler's Signature/Date Molec 0 6/25
	(2" = 0.16) (4" = 0.65)





# **GROUNDWATER SAMPLING FIELD DATA SHEET**

SITE: McKinney Phase II GW Sampling

WELL ID: MW-

PROJECT NUMBER: <u>01723.062.007.0002</u>

DATE: Cel 20018

Casing Diameter 2" 4"	Screened Interval (ft. BGS)	Flow Rate <sup>1</sup> See Below
Total Depth after sampling (ft. BTOC)	Purge Equipment	Sample Equipment
30.24 'sem-5044	Peristaltic Pump, new tubing, flow thru cell	Same as purge, less flow thru cell
Static Water Level (ft. BTOC)	Depth of Sample Intake (ft, BTOC)	Analytical Equipment
with tubing in well 12.63	120	Horiba U52 water quality meter
Stick Up Flush mount	Time Purge Started	

Time	Flow Rate LPM	Volume Purged Liters	<b>pH</b> (+/- 0.1)	Sp. Cond. mS/cm (+/- 3%)	Temperature  °C (+/- 0_1)	ORP mV (+/- 10)	DO mg/L (+/- 10%)	<b>Turbidity</b> NTU	Appearance Clear – C Opaque – O Cloudy – Cl Grey – G Tan – T	Depth to Water   ft, BTOC
HIM	0.25	0.5	le:55	1.61	27.01	23)	0.72	0.0	C	<b>B35</b>
1119	0.7	1.5	6.65	1.53	35.85	214	039	0.0	C	12.74
1124	0.2	25	10.62	1.56	24.58	163	0-31	45.3	C	12.75
1129	0.2	3.5	6.66	1-48	26.64	139	0.79	0.0	C	12.75
1134	0.2	4,5	467	1.42	27-37	97	0.25	43.4	C	12.75
1139	0.2	5.5	647	1.39	27.35	80	0. વેપ	32.9	C	12.75
			Enc	lot	/					
					ley					

	121e/18	Sample Time:	1140
Comments: All above water quality parameters will be recorded, but determine well stabilization. Collect sample and document if the para Did all parameters stabilize within 5 readings? Test No (if no, list)	meters do not stabilize afte	er 5 evelor	
Level of PPE: D – Steel toed boots, safety glasses, nitrile gloves	Analytical Parameters  DTEX, TOT, PATENCE COMMON CO	ts won hold)	, Netabl mercing.
<b>Disposition of Purged Water:</b> Placed in new 55-gallon steel drum left on-site,	Sampler's Signature/D	ate	612618

maximum draw down should be <1 ft. from initial static WL

(2" = 0.16)

Note: Submitted field filtered and unfield filtered thousand samples for metals/mercury and nex chame. Field filtered metals/ mercury samples on noted



# GROUNDWATER SAMPLING FIELD DATA SHEET

SITE: McKinney Phase II GW Sampling

WELL ID: MW-2

PROJECT NUMBER: <u>01723.062.007.0002</u>

DATE: 6/26/18

Casing Dimmeter	Screened Interval (ft. BGS)	Flow Rate <sup>1</sup> See Below
(2") 4"	20-30	
Total Depth after sampling (ft, BTOC)	Purge Equipment	Sample Equipment
29.25 soft	Peristaltic Pump, new tubing, flow thru cell	Same as purge, less flow thru cell
Static Water Level (ft. BTOC)	Depth of Sample Intake (ft, BTOC)	Analytical Equipment
before placing tubing in well		Horiba U52 water quality meter
with tubing in well 12.42	~3S	
	Time Purge Started	
Stick Up Flush mount	1303	

Time	Flow Rate LPM	Volume Purged Liters	<b>pH</b> (+/- 0.1)	Sp. Cond. mS/cm (+/- 3%)	Temperature °C (+/- 0,1)	ORP mV (+/- 10)	<b>DO</b> mg/L (+/- 10%)	<b>Turbidity</b> NTU	Appearance Clear – C Opaque – O Cloudy – Cl Grey – G Tan – T	Depth to Water <sup>1</sup> ft. BTOC
(307	0.2	0.5	6.93	1.03	27.01	158	0.61	0.0	U	12.50
1312	0.2	1.5	687	1.02	25.89	152	0.37	0.0	C	12.53
1317	0.2	25	6.55	0.995	25.76	153	0.33	44.2	C	ia \$3
1239	0.2	3.5	6.54	0 945	25.85	152	0.32	39.3	$\mathcal{C}$	12:53
132A	0.2	4.5	6.86	0.968	25.83	149	0.28	0,0	$\mathcal{C}$	1253
1332	0.2	5.5	6.86	0.949	26.06	148	0.34	0.0	C	12.53
				Torch						
					of log					

Sample ID:

Sample Date:

() X(1) 8

Sample Time:

Sample Time:

33.3

Comments: All above water quality parameters will be recorded, but only pH. temperature, conductivity, ORP, and DO will be used to determine well stabilization. Collect sample and document if the parameters do not stabilize after 5 cycles.

Did all parameters stabilize within 5 readings (TYes (No (if no. list parameters that did not stabilize: HMP, St. (DALIP)

CONCULT (MCLICATE) MM-12 (S. MM) tancound to (NOLs, (Notac) functions), but comment (NOLs, (NoLs

<sup>1</sup>maximum draw down should be <1 ft. from initial static WL

(2" = 0.16) 0 (4" = 0.65)

Note: Submitted field titled (10-mm) and unfield fitted samples for metals/mercing and hex. Unround analysis.
Field titled metals/mercing samples on hold





Well ID: MW-01

Project Name: 3915 McKinney Phase II Project Number: 01723.062.007.0002 Site Location: 3915 McKinney Street

Houston, TX

Logged By: R. Goss D. Denham Approved By: Date(s) Drilled: 06/21/2018

Time of Boring:

Static W. Depth: 12,68'

Initial W. Level: 12,5'

**Drilling Contractor:** Best Drilling

Driller's Name: Alfredo Palacios

**Drilling Method:** Hollow-Stem Auger

Drilling Rig: CME 45

Sampling Method: Split Spoon (continuous)

Total Depth: 30' Completed Depth: 30'

Borehole Dia.: 8.25"

Top of Casing Elevation: Ground Surface Elevation: NA

Datum: NA



Page 1 of 1

Firm Registration No.: 50258

Latitude: Longitude: NA

-							J			
Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol	Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
0_		CS	100%	1:1		Z-Z-Z- Z-Z-Z- Z-Z-Z-	CLAY with SAND - dark brown with trace dark red mottles, some silt, fine-grained, dry		000000000	Grout: Cement Quick Grout From: 0 - 5' bgs  Blank Casing: Casing: PVC Diameter: 2"
5_	MW-01 (5)			1,2	CL	Z-Z-Z Z-Z-Z- Z-Z-Z-	at 5.5', grades to gray and light gray with trace light brown laminations at 6.5', some calcerous material present		00	From: 0 - 9.5' bgs  Bentonite: Type: 3/8" Chips, Holeplug From: 5' - 8' bgs
10	MW-01 (10)	CS	85%	62		7-7-7-	SANDY CLAY - reddish brown with some gray and trace			
		cs	90%	3.6	CL		light brown laminations, trace black mottles, some silt, moist  CLAYEY SAND - reddish brown with gray laminations, trace silt, fine to medium-grained, saturated	*		
15 —	80	cs	60%	9.4	sc		at 15', sand becomes flowing			
20 —				7.2			at 18', clay and silt content decrease with depth			Sand Pack: Type: Silica sand 16/30 From: 8' - 30' bgs
-		CS	40%							Screen Size: 0.010" Diameter: 2" From: 9.5' - 29.5' bgs
25 -		cs	80%	13.2	SP		SAND - brown, trace clay and silt, very fine to fine-grained, saturated			
30					СН		CLAY - orange and gray mottled, trace silt, minor very fine- grained sand, dry			Sump: 29.5' - 30' bgs



Well ID: MW-02

**Project Name:** 3915 McKinney Phase II **Project Number:** 01723.062.007.0002

Site Location: 3915 McKinney Street Houston, TX

Logged By: R. Goss
Approved By: D. Denham
Date(s) Drilled: 06/21/2018

Time of Boring:

Static W. Depth: 12,42'

Initial W. Level: 14.75'

**Drilling Contractor:** Best Drilling

Driller's Name: Alfredo Palacios

Drilling Method: Hollow-Stem Auger

Drilling Rig: CME 45

Sampling Method: Split Spoon (continuous)

Total Depth: 30'

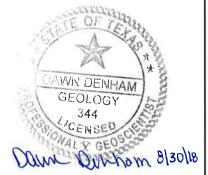
Completed Depth: 30'

Borehole Dia.: 8.25"

Top of Casing Elevation: NA

Ground Surface Elevation: NA

Datum: NA



Page 1 of 1

State of Texas Geoscience Firm Registration No.: 50258

Latitude: NA Longitude: NA

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ᆫ	Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol	Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
(	0						,,,,,,,	CONCRETE - Paved parking lot			Concrete: From: 0' - 1' bgs
		MW-02 (1)	cs	100%	2,1			CLAY - dark gray with minor gray and dark yellow mottles, some silt, trace fine-grained sand, moist at 0.75', gray sandy layer		00000000000000000000000000000000000000	
	5—				5,6			at 5', grades to gray with trace dark gray and yellow layers		2000 2000 3000	Grout: Cement Quick Grout From: 1 - 14' bgs
			cs	100%	12.5	CL		at 7', some calcareous material, grades to light brown and gray		00000	
10	-	MW-02 (10)			12.2			at 9.5', abundant calcareous layer 2" thick		00000	Blank Casing: Casing: PVC Diameter: 2" From: 0 - 19,5' bgs
	-		cs	60%	13.3	SP			*		ı
15	-				10.1	Or .		CLAYEY SAND - brown with gray mottles, fine-grained, moderately sorted, flowing			Bentonite: Type: 3/8" Chips, Holeplug From: 14' - 17' bgs
			cs	60%	4.8	sc		at 17.5', occasional red clay layers, less than 1" thick until 20,25'			Tronk 14 Tr bgs
20	-		0.0		6.1			SAND - brown, fine-grained, well sorted, trace silt and clay, saturated			Sand Pack: Type: Silica sand 16/30 From: 17' - 30' bgs
25	-		CS	80%	5.1						¥3
	-		cs	80%	3.1			at 27.5', occasional red clay layers, less than 1" thick			Screen Size: 0.010" Diameter: 2" From: 19.5' - 29.5' bgs
30		2444\Thu Phuono Enter	nvica D	CDD And	(IData)Pa	CH	-7-7-	CLAY - gray, minor fine-grained sand and silt, slightly moist			Sump: 29.5' - 30' bgs



Well ID: SB-01

Project Name: 3915 McKinney Phase II
Project Number: 01723.062.007.0002
Site Location: 3915 McKinney Street

Houston, TX

Logged By: R. Goss
Approved By: D. Denham
Date(s) Drilled: 06/22/2018

Time of Boring:

Static W. Depth: NA

Initial W. Level: NA

Drilling Contractor: Best Drilling

Driller's Name: Alfredo Palacios

Drilling Method: DP

Drilling Rig: GeoProbe

Sampling Method: Acetate Sleeve (continuous)

Total Depth: 10'
Completed Depth: NA
Borehole Dia.: 2.25"

Top of Casing Elevation: NA Ground Surface Elevation: NA

Datum: NA

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Page 1 of 1

State of Texas Geoscience Firm Registration No.: 50258

Latitude: NA Longitude: NA

						Datum. NA			
Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
0		CS	100%		SW CL	FILL - concrete and sand fill material  SILTY CLAY - dark gray, trace fine-grained sand, slightly moist, pliable			
5	SB-01 (5)	CS	100%	0.0	CH	CLAY - gray with red mottles, minor silt and sand, hard, dry at 7.5', becomes gray with yellow and brown mottles, calcerous concretions			Bentonite: Type: 3/8" Chips, Holeplug From: 0' - 10' bgs
10 L	SB-01 (10) 02444\Thu Phuong Enlei	rorise - F	CRP 026	1\Data\Bo	ring logs	This log should not be used seperately from the original report			



Well ID: SB-02

Project Name: 3915 McKinney Phase II Project Number: 01723.062.007.0002 Site Location: 3915 McKinney Street

Houston, TX

Logged By: R. Goss D. Denham Approved By: Date(s) Drilled: 06/22/2018

Time of Boring:

Y Static W. Depth: NA

Initial W. Level: NA

**Drilling Contractor:** Best Drilling

Driller's Name: Alfredo Palacios

**Drilling Method:** 

**Drilling Rig:** GeoProbe

Sampling Method: Acetate Sleeve (continuous)

**Total Depth:** 10'

Completed Depth: NA

Borehole Dia.: 2.25"

Top of Casing Elevation: Ground Surface Elevation: NA

Datum: NA

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Page 1 of 1

State of Texas Geoscience Firm Registration No.: 50258

Latitude: Longitude: NA

Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol	Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
0		CS	100%	0.0			SILTY CLAY - dark gray with red inclusions, with trace fine- grained sand, moist, upper 0.5' consists of mixed silty clay and gravel, very moist			
5-	SB-02 (5)	CS	100%	1.9	CL		From 5' to 6', dark gray silty clay with bits of gravel, wet  CLAY - green and gray, calcareous material, hard, dry			Bentonite: Type: 3/8" Chips, Holeplug From: 0' - 10' bgs
10	SB-02 (9) _02444\Thu Phuong Ente	rorise - F	CRP 026	1\Data\Pa	ring logs		This log should not be used seperately from the original report			



Page 1 of 1

Well ID: SB-03

Project Name: 3915 McKinney Phase II Project Number: 01723.062.007.0002

Site Location: 3915 McKinney Street

Houston, TX

Logged By: R. Goss D. Denham Approved By: Date(s) Drilled: 06/22/2018

Time of Boring:

Static W. Depth: NA

✓ Initial W. Level: NA

**Drilling Contractor:** Best Drilling

Alfredo Palacios Driller's Name:

**Drilling Method:** 

GeoProbe Drilling Rig:

Sampling Method: Acetate Sleeve (continuous)

Total Depth: 10' Completed Depth: NA

2.25" Borehole Dia.:

Top of Casing Elevation: NA Ground Surface Elevation: NA

Datum: NA

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State of Texas Geoscience Firm Registration No.: 50258

Latitude: NA Longitude: NA

Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol	Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
5 - 10	SB-03 (5)	CS	100%	3.5	CL		SILTY CLAY - dark gray with red mottles, minor sand, moist, moisture content decreases with depth, upper 0.5' consists of silty clay with concrete fill material with gravel  From 5' to 6', grayish brown silty clay, wet  at 6', becomes light gray with reddish brown mottles, dark organic material present, occasional calcareous concretions present, dry	5		Bentonite: Type: 3/8" Chips, Holeplug From: 0' - 10' bgs
	O 024441Thu Phuona Ente	and a	000	41D-4-10	-tt		This loss should not be used reposately from the existent second			



Well ID: SB-04

Project Name: 3915 McKinney Phase II
Project Number: 01723.062.007.0002
Site Location: 3915 McKinney Street

Houston, TX

Logged By: R. Goss
Approved By: D. Denham
Date(s) Drilled: 06/22/2018

Time of Boring:

Static W. Depth: NA

Initial W. Level: NA

**Drilling Contractor:** Best Drilling

Driller's Name: Alfredo Palacios

Drilling Method: DF

Drilling Rig: GeoProbe

Sampling Method: Acetate Sleeve (continuous)

Total Depth: 10'
Completed Depth: NA

Borehole Dia.: 2,25"

Top of Casing Elevation: NA Ground Surface Elevation: NA

Datum: NA

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Page 1 of 1

State of Texas Geoscience Firm Registration No.: 50258

Latitude: NA Longitude: NA

Depth (ft)	Analysis Interval	Sample Type	% Recovery	Organic Vapor (ppm)	USCS Symbol	Graphic Log	Lithologic Description	Water Level	Well Construction	Installation Notes:
0	SD 04/50	cs	100%	10_1	CL		SILTY CLAY - dark gray with red mottles, minor sand, upper 0.5' consists of silty clay with approximately 50% sandy fill material			
10	SB-04 (5) SB-10 (5) [duplicate]	CS	100%	4.4	GL.		at 6', becomes gray with yellow brown mottles, occasional calcareous concretions present, dry, hard			Bentonite: Type: 3/8" Chips, Holeplug From: 0' - 10' bgs



Project Name: 3915 McKinney Phase II

Houston, TX

D. Denham

Static W. Depth: NA

Initial W. Level:

Project Number: 01723.062.007.0002

R. Goss

Site Location: 3915 McKinney Street

# **Well Log**

Well ID: SB-05

**Drilling Contractor:** Best Drilling

Driller's Name: Alfredo Palacios

**Drilling Method:** 

**Drilling Rig:** 

GeoProbe

Sampling Method: Acetate Sleeve (continuous)

Total Depth:

Completed Depth:

NA

Borehole Dia.:

2.25"

Firm Registration No.: 50258

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Page 1 of 1

Top of Casing Elevation:

Ground Surface Elevation: NA

Latitude: NA Longitude: NA

Datum: NA

Depth (ft) Analysis Interval

Logged By:

Approved By:

Time of Boring:

Date(s) Drilled: 06/22/2018

**Lithologic Description** 

Well Construction

Leve

Installation Notes:

JSCS Symbol Sample Type Organic Vapor (ppm) Graphic Log % Recovery SILTY CLAY - dark gray, minor sand, upper 0.5' consists of fill material and gravel 100% 0.0 From 5' to 6', dark gray silty clay, minor sand, moist Bentonite: Type: 3/8" Chips, Holeplug From: 0' - 10' bgs SB-05 (5) CL at 6', becomes light gray with red mottles, black organic material, occasional calcareous concretions present, dry 100% 0.0 SB-05 (10)

H:\TCEQ\_02444\Thu Phuong Enterprise - DCRP 0261\Data\Boring logs CS - Continuous Sampler

SS - Split-Spoon Sampler

This log should not be used seperately from the original report

## STATE OF TEXAS WELL REPORT for Tracking #488136

Owner: Owner Well #: MW-01 **Brownfields Redevelopment Program** 

Address: 1002 Washington Ave Grid #: 65-22-1

Houston, TX 77002

Latitude: 29° 44' 34.11" N Well Location: 3915 McKinney

Longitude: 095° 20' 22.7" W

Well County: **Harris** Elevation: No Data

Type of Work: **New Well** Proposed Use: **Monitor** 

Drilling Start Date: 6/21/2018 Drilling End Date: 6/21/2018

Houston, TX 77023

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.) Borehole: 8 30 0

**Hollow Stem Auger Drilling Method:** 

Borehole Completion: **Filter Packed** 

Filter Material Size Top Depth (ft.) Bottom Depth (ft.) Filter Pack Intervals: 8 30 Sand 20/40

Top Depth (ft.) Bottom Depth (ft.) Description (number of sacks & material) Annular Seal Data: 0 6 Concrete 1 Bags/Sacks 6 8 Bentonite 1 Bags/Sacks

Seal Method: Tremie Distance to Property Line (ft.): No Data

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

**Surface Slab Installed** Surface Completion: Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified Water Quality:

No Data

Water Type

No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No** 

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEST DRILLING SERVICES, INC.

P.O. BOX 845

FRIENDSWOOD, TX 77549

Driller Name: Alfredo Palacios License Number: 5036

Comments: No Data

# Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	10	CLAY with SAND, some SILT, drk. brown
10	12.5	SANDY CLAY, red brown with gray and trace light brown laminations
12.5	25	grades to CLAYEY SAND, fine to medium grained, trace SILT, reddish brown w/gray laminations
25	29	SAND, brown, very fine to fine, trace CLAY & SILT
29	30	CLAY, minor very fine SAND, trace SILT, orange and gray mottled

# Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Riser	New Plastic (PVC)	40	0	10
2	Screen	New Plastic (PVC)	40 0.010	10	30

#### IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

## STATE OF TEXAS WELL REPORT for Tracking #488139

Owner: Brownfields Redevelopment Program Owner Well #: MW-02

Address: 1002 Washington Ave. Grid #: 65-21-3

Houston, TX 77002

Well Location:

3915 McKinney
Houston, TX 77023
Longitude: 095° 23' 58.7" W

Latitude:

29° 44' 34.11" N

Well County: Harris Elevation: No Data

Type of Work: New Well Proposed Use: Monitor

Drilling Start Date: 6/21/2018 Drilling End Date: 6/21/2018

Diameter (in.) Top Depth (ft.) Bottom Depth (ft.)

Borehole: 8 0 30

Drilling Method: Hollow Stem Auger

Borehole Completion: Filter Packed

Top Depth (ft.) Bottom Depth (ft.) Filter Material Size

Filter Pack Intervals: 18 30 Sand 20/40

Annular Seal Data:

Top Depth (ft.)

Bottom Depth (ft.)

Description (number of sacks & material)

Concrete 1 Bags/Sacks

16

18

Bentonite 1 Bags/Sacks

Seal Method: **Tremie** Distance to Property Line (ft.): **No Data** 

Sealed By: **Driller** Distance to Septic Field or other

concentrated contamination (ft.): No Data

Distance to Septic Tank (ft.): No Data

Method of Verification: No Data

Surface Completion: Surface Slab Installed Surface Completion by Driller

Water Level: No Data

Packers: No Data

Type of Pump: No Data

Well Tests: No Test Data Specified

Water Quality:

Strata Depth (ft.)	Water Type
No Data	No Data

Chemical Analysis Made: No

Did the driller knowingly penetrate any strata which contained injurious constituents?: **No** 

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the report(s) being returned for completion and resubmittal.

Company Information: BEST DRILLING SERVICES, INC.

P.O. BOX 845

FRIENDSWOOD, TX 77549

Driller Name: Alfredo Palacios License Number: 5036

Comments: No Data

# Lithology: DESCRIPTION & COLOR OF FORMATION MATERIAL

Top (ft.)	Bottom (ft.)	Description
0	0.33	Concrete
0.33	14.75	CLAY, drk. gray, some SILT, trace fine SAND gray and drk. yellow mottles
14.75	20	CLAYEY SAND, brown w/gray mottles, fine grained, flowing, occasional CLAY layers
20	28.75	SAND, fine grained brown well sorted, trace SILT and CLAY
28.75	30	CLAY, minor fine SAND and SILT, gray slightly moist

# Casing: BLANK PIPE & WELL SCREEN DATA

Dla (in.)	Туре	Material	Sch./Gage	Top (ft.)	Bottom (ft.)
2	Riser	New Plastic (PVC)	40	0	20
2	Screen	New Plastic (PVC)	40 0.010	20	30

#### IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking Number on your written request.

Texas Department of Licensing and Regulation P.O. Box 12157 Austin, TX 78711 (512) 334-5540

01723.062.007.002 MCKING UW Sampling 1445 RD WHENT TIPW- 3] Soil composite sample from 4 10w soil downs on site. for TUP RULA METALS, TUP VOLS, TUP SVOLS, TPH, cyanide 1450 Ro pertorm + to final decon on all non-asposable equipment. Pisposi of 1000 water from decon + purge IN Jutes dim from developing. Final drym inventory. ice was - p - 10w (decorning angels). dum wintours planti wrong and ~ 25 gar deron warr + 3 IPW water - 2 tril (developing), , contains ~17 gas deconforge wet. 1517 RO depart site for ATB lab 1536 lo arrive at Agos was and return unused sample bottles and relinguish sample 1543 to depart lab for warehouse -1615 PD arrives back at wavehour and hours equipment from the Ending milage: 134332 miles 1650 RO departo warehouse

01723.062.007.0002 McKinny Plugging - Abandoning Matthew Patrolia (MP) - Weston deport 0700 arrive once and make with Leah who is in charge. Owner not on site. makes contact with Alberto Best Drilling Verform wallethrough. Review Scope of Work conducts Itealth & Set Meeting Review Scope of Work, Mospital, slips/trips/falls. Best begings plugging and abandoning completed. Dest begins plugging and abandoning of MW-Z completed. Best deports sile tries to contact Leah, but laked MP leaves voicement to let him know that wells have been plugged and that leaving site. deports destination tinal

## STATE OF TEXAS PLUGGING REPORT for Tracking #180780

Owner: Brownfields Redevelopment Program Owner Well #: MW-02

Address: 1002 Washington Ave. Grid #: 65-21-3

Houston, TX 77002

Well Location: 3915 McKinney Latitude: 29° 44' 34.11" N

Houston, TX 77023 Longitude: 095° 23' 58.7" W

Well County: Harris Elevation: No Data

Well Type: **Monitor** 

#### Drilling Information

Company: **BEST DRILLING SERVICES, INC.** Date Drilled: 6/21/2018

Driller: Alfredo Palacios License Number: 5036

### Well Report Tracking #488139

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)	
Borehole:	8	0	30	

#### Plugging Information

Date Plugged: 9/17/2018 Plugger: Alfredo Palacios

Plug Method: Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth,

cement top 2 feet

#### Casing Left in Well:

#### Plug(s) Placed in Well:

Dla (in.)	Top (ft.)	Bottom (ft.)	Тор	(ft.) Bo	ottom (ft.)	Description (number of sacks & material)
0	0	0	0		30	CEMENT BENTONITE GROUT 2  Bags/Sacks

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the reports(s) being returned for completion and resubmittal.

Company Information: **BEST DRILLING SERVICES, INC.** 

P.O. BOX 845

FRIENDSWOOD, TX 77549

Driller Name: Alfredo Palacios License Number: 5036

Comments: No Data

## STATE OF TEXAS PLUGGING REPORT for Tracking #180779

Owner: Brownfields Redevelopment Program Owner Well #: MW-01

Address: 1002 Washington Ave Grid #: 65-22-1

Houston, TX 77002

Well Location: 3915 McKinney Latitude: 29° 44' 34.11" N

Houston, TX 77023 Longitude: 095° 20' 22.7" W

Well County: Harris Elevation: No Data

Well Type: Monitor

#### Drilling Information

Company: **BEST DRILLING SERVICES, INC.** Date Drilled: 6/21/2018

Driller: Alfredo Palacios License Number: 5036

### Well Report Tracking #488136

	Diameter (in.)	Top Depth (ft.)	Bottom Depth (ft.)	
Borehole:	8	0	30	

#### Plugging Information

Date Plugged: 9/17/2018 Plugger: Alfredo Palacios

Plug Method: Pour in 3/8 bentonite chips when standing water in well is less than 100 feet depth,

cement top 2 feet

#### Casing Left in Well:

#### Plug(s) Placed in Well:

Dla (in.)	Top (ft.)	Bottom (ft.)	Тор	) (ft.)	Bottom (ft.)	Description (number of sacks & material)
0	0	0		0	30	CEMENT BENTONITE GROUT 2  Bags/Sacks

Certification Data: The driller certified that the driller plugged this well (or the well was plugged under the

driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in

the reports(s) being returned for completion and resubmittal.

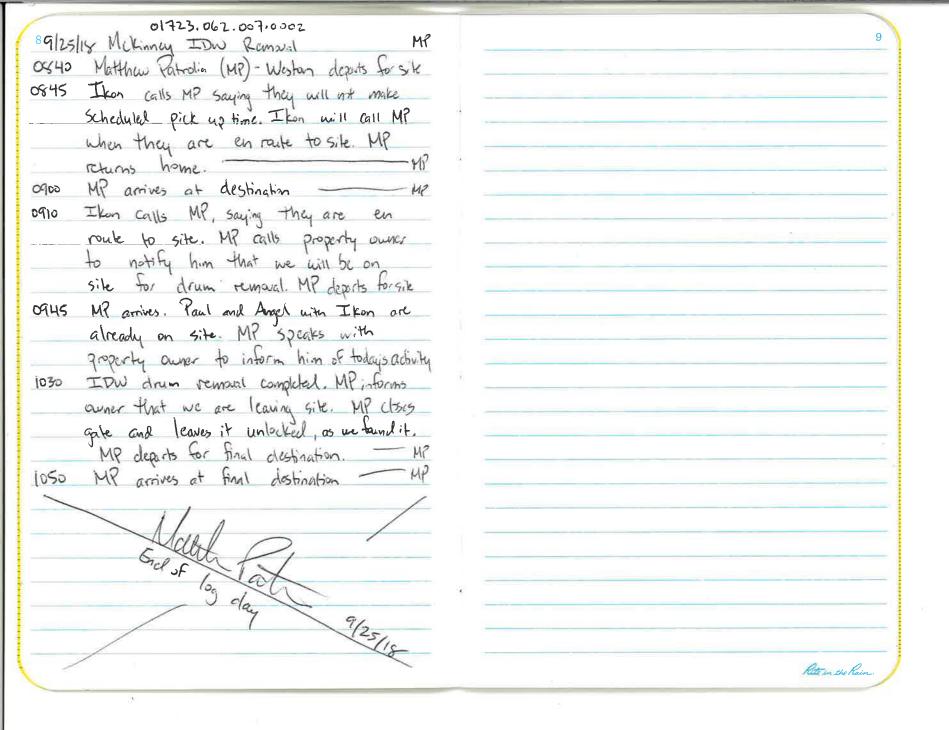
Company Information: **BEST DRILLING SERVICES, INC.** 

P.O. BOX 845

FRIENDSWOOD, TX 77549

Driller Name: Alfredo Palacios License Number: 5036

Comments: No Data





Goldenrod - Generator Retain

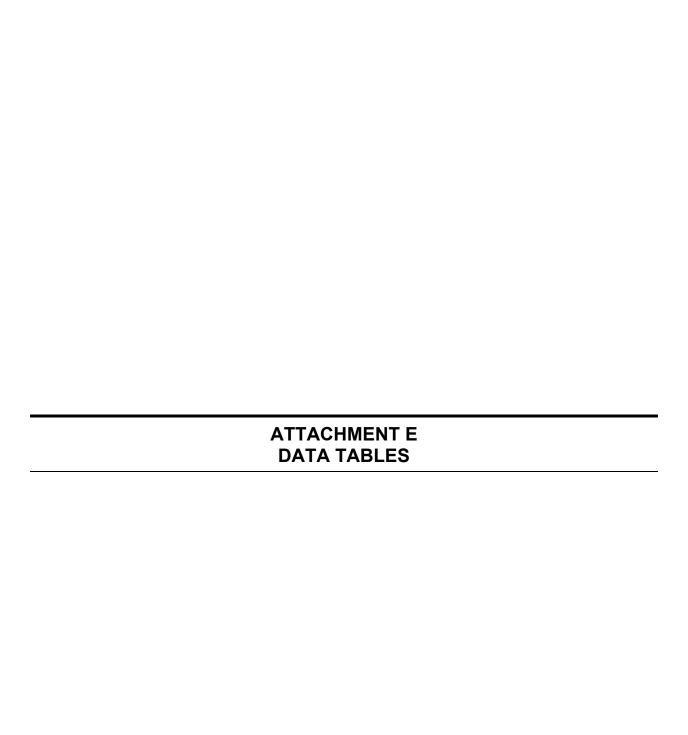


# TKON Job# 950-168. 20-18 NON-HAZARDOUS MANIFEST

	GENEF	RATOR				
Generator Brownfields Redoute	looment	rogram				
Address 1002 Washington,		I.D. # N/A				
Office 339 1		Shipping Location	39151	nc	Kinn	ey St.
Houston, tx 770	02	Address	ouston	T	exas	1
Phone		Phone				
Description of Waste Materials	Industrial Waste Code #	Profile Number	Total Quantity	M.C.	nit of asure	Container Type
NH-C2-Soil	N/A	0478180984	4		Ea	Drum
NH C2 - Liquid	NIA	0478180982	. 4		Ea	Drum
			122			
state law or regulation, have been fully and accura portation according to applicable law and regulation  Generator Authorized Agent Name (Print)	S.	Signature	Patra		9/25 Deliver	18
Transporter Name	46)	Driver Name (Print)	Angel	Gar	ncir	
IKON ENVIRONMENTAL		Truck Number	0			
Address SOLUTIONS LP 1102 Ralphcrest Drive Houston, TX 77039		Truck Type F2				
I hereby acknowledge receipt of the above-describe		I hereby acknowled received from the	e generator	shipp	ing loca	tion and were
for transport from the generator shipping location lis	sted above.	transported withou	ut incident to th	ne des	stination	listed below.
Driver Signature Ship	ment Date	Driver Signature				Delivery Date
Market State of the State of th	DESTIN	IATION				
Site Name Fort Bend Regional Landfi	Ш		-			
Address14115 Davis Estate Road						
Needville, TX 77461		Phone Number	9'	79-79	3-4430	
Disposal Location: North Eas	st	Level				
I hereby acknowledge receipt of the above-descr	ibed materials	cemd	Rais	W	4	9.25/6
Name of Authorized Agent (Print)		Signature			Ų	Receipt Date
White - Original Canary - Disposer Retain		Pink - Transporter Retain	1	Carlotte (	Goldenrod	- Generator Retain

Pink - Transporter Retain

Canary - Disposer Retain



# Table E1 Soil Metals and TPH Analytical Data 3915 McKinney - Houston, Texas

		Analyte								Me	tals							TPI	H 1005	
		Analyte			Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Lead	Mercury	Nickel	Selenium	Silver	Cyanide	Petroleum Hydrocarbons (C06 to C12)	Petroleum Hydrocarbons (>C12 to C28)	Petroleum Hydrocarbons (>C28 to C35)	Petroleum Hydrocarbons, Total (C06 to C35)
		CAS.NO			7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-43-9	7440-47-3	7439-92-1	7439-97-6	7440-02-0	7782-49-2	7440-22-4	57-12-5	TPH-1005-1	TPH-1005-2	TPH-1005-4	TPH_C06-C35
		l Tot Soil Comb			15	24	8100	38	52	33000	500	3.6	840	310	97	45	1600	2300	2300	NP
		ıl <sup>GW</sup> Soil <sub>Ing</sub> ]			5.4	5	440	1.8	1.5	2400	3	0.0078	160	2.3	0.48	40	65	200	200	NP
T	exas-Specific Ba		Concentration	ıs	1	5.9	300	1.5	NP	30	15	0.04	10	0.3	NP	NP	NP	NP	NP	NP
Station	Sample ID	Depth (feet bgs)	Date	Type																
MW-01	MW-01 (5)	5.0-5.0	6/21/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.3 U	23.4 U	20.4 U	27.3 U
MW-01	MW-01 (10)	10.0-10.0	6/21/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	27.8 U	23.8 U	20.8 U	27.8 U
MW-02	MW-02 (1)	1.0-1.0	6/21/2018	O	0.12 UR	1.13	81 JL	0.47	0.05 U	9.57	33.7 JL	0.133	12100	0.12 U	0.02 U	0.01 JL	NA	NA	NA	NA
MW-02	MW-02 (10)	10.0-10.0	6/21/2018	О	0.43	4.09	600	0.668	0.05 U	10.4	6.18	0.00104 U	36.3	0.36	0.03 J	0.01 UJL	NA	NA	NA	NA
SB-01	SB-01 (5)	5.0-5.0	6/22/2018	0	0.12 U	0.888	126	0.68	0.05 U	6.89	6.79	0.00799	3.65	0.12 U	0.02 U	0.01 UJL	NA	NA	NA	NA
SB-01	SB-01 (10)	10.0-10.0	6/22/2018	0	0.46	2.7	220	0.823	0.05 U	12.9	6.16	0.00105 U	20.6	0.3 J	0.02 U	0.01 UJL	NA	NA	NA	NA
SB-02 SB-02	SB-02 (5) SB-02 (9)	5.0-5.0 9.0-9.0	6/22/2018 6/22/2018	0	0.12 U	1.57	139	0.806	0.05 U	7.05	7.03	0.00735	4.84	0.12 U	0.02 U	0.01 UJL	NA NA	NA NA	NA NA	NA NA
	` '				0.541	8.38	153	0.842	0.05 U	11.1	7.77	0.00179 J	10	0.19 J	0.02 U	0.01 UJL	NA NA	NA NA	NA NA	NA NA
SB-03 SB-03	SB-03 (5) SB-03 (10)	5.0-5.0 10.0-10.0	6/22/2018 6/22/2018	0	0.23 J 0.29 J	1.36 5.96	142 1050	0.636 0.563 J	0.05 U <b>0.06 J</b>	8.91 15.7	6.69 5.06	0.00483 J 0.00158 J	4.46 28.1	0.12 U <b>0.45 J</b>	0.02 U 0.08 J	0.01 UJL 0.01 UJL	NA NA	NA NA	NA NA	NA NA
SB-03	SB-03 (10)	5.0-5.0	6/22/2018	0	0.29 J	1.7	236	0.676	0.05 U	7.99	15.7	0.00138 3	6.89	0.43 J 0.17 J	0.03 U	0.01 UJL	NA NA	NA NA	NA NA	NA NA
SB-04	SB-04 (3) SB-04 (10)	10.0-10.0	6/22/2018	0	0.23	5.73	262	0.619	0.05 U	8.26	13.7	0.00370 0.00102 U	27.2	0.17 3	0.02 U	0.01 UJL	NA NA	NA NA	NA NA	NA NA
SB-04	SB-10 (5)	5.0-5.0	6/22/2018	DUP	0.32 0.25 J	1.42	109	0.623	0.05 U	8.83	5.8	0.00102 0	4.79	0.37 0.17 J	0.02 U	NA	NA NA	NA NA	NA NA	NA
SB-05	SB-05 (5)	5.0-5.0	6/22/2018	0	0.17 J	1.33	173	0.725	0.05 U	10.4	7.13	0.0072	4.46	0.12 U	0.02 U	0.01 UJL	NA	NA	NA	NA
SB-05	SB-05 (10)	10.0-10.0	6/22/2018	O	0.34 J	2.32	185	0.881	0.05 U	15.6	5.23	0.00138 J	14	0.12 U	0.02 U	0.01 UJL	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP direct contact protective concentration levels (PCLs), 0.5-acre

All values in milligrams per kilogram

bgs - below ground surface

**Bold** concentration reported at or above the sample detection limit (SDL)

## Highlighted value exceeds the Tot Soil Comb PCL

NA - Not Analyzed

NC - Not Calculated

NP - Not Published

- U Analyte not reported above the SDL
- J Analyte concentration is estimated
- L Bias in sample result likely to be low
- R Rejected due to poor matrix spike/matrix spike duplicate recoveries



<sup>&</sup>lt;sup>2</sup>April 2018 TRRP soil to groundwater PCLs, 0.5-acre source area

Analyte							7	Volatile Org	anic Compo	unds (VOCs	)						
Analyte	.,1,1,2-Tetrachloroethane	.,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	.,1,2-Trichloroethane	.,1-Dichloroethane	.,1-Dichloroethene	.,1-Dichloropropene	,2,3-Trichlorobenzene	.,2,3-Trichloropropane	,2,4-Trichlorobenzene	,2,4-Trimethylbenzene	,2-Dibromo-3- chloropropane	,2-Dibromoethane	,2-Dichlorobenzene	.,2-Dichloroethane	.,2-Dichloropropane	,3,5-Trimethylbenzene
CAS.NO	630-20-6	71-55-6	79-34-5	79-00-5	75-34-3	75-35-4	563-58-6	87-61-6	96-18-4	120-82-1	95-63-6	96-12-8	106-93-4	95-50-1	107-06-2	78-87-5	108-67-8
Residential Tot Soil Comb PCLs 1	65	53000	30	18	11000	2300	36	120	0.2	120	1600	0.15	2.5	720	41	61	1500
Residential <sup>GW</sup> Soil <sub>Ing</sub> PCLs <sup>2</sup>	1.4	1.6	0.023	0.02	18	0.05	0.13	26	0.00053	4.8	33	0.0017	0.00021	18	0.014	0.023	36
Station Sample ID   Depth   Type					-	-						-					
MW-01 MW-01 (5) 5.0-5.0 6/21/2018 O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-01   MW-01 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-02   MW-02 (1)   1.0-1.0   6/21/2018   O		0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00232 U	0.00116 U	0.00232 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U
MW-02   MW-02 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-01 SB-01 (5) 5.0-5.0 6/22/2018 O			0.00106 U	0.00106 U	0.00106 U	0.00212 U	0.00106 U	0.00212 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U
SB-01   SB-01 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-02 SB-02 (5) 5.0-5.0 6/22/2018 O			0.0011 U	0.0011 U	0.0011 U	0.00219 U	0.0011 U	0.00219 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
SB-02 SB-02 (9) 9.0-9.0 6/22/2018 O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-03 SB-03 (5) 5.0-5.0 6/22/2018 O			0.00106 U	0.00106 U	0.00106 U	0.00212 U	0.00106 U	0.00212 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U
SB-03   SB-03 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-04 SB-04 (5) 5.0-5.0 6/22/2018 O			0.00109 U	0.00109 U	0.00109 U	0.00219 U	0.00109 U	0.00219 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U
SB-04 SB-04 (10) 10.0-10.0 6/22/2018 O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-04 SB-10 (5) 10.0-10.0 6/22/2018 DUP			0.00102 U	0.00102 U		0.00205 U	0.00102 U			0.00102 U			0.00102 U	0.00102 U		0.00102 U	0.00102 U
SB-05   SB-05 (5)   5.0-5.0   6/22/2018   O			0.00117 U	0.00117 U	0.00117 U	0.00235 U	0.00117 U	0.00235 U		0.00117 U	0.00117 U		0.00117 U	0.00117 U			0.00117 U
SB-05   SB-05 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP direct contact protective concentration levels (PCLs), 0.5-acre source area

All values in milligrams per kilogram (mg/kg)

bgs - below ground surface

NA - Not Analyzed U - Analyte not reported above the SDL



<sup>&</sup>lt;sup>2</sup>April 2018 TRRP soil to groundwater PCLs, 0.5-acre source area

Analyte									VOCs								
Analyte	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	Вепzепе	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene
CAS.NO	541-73-1	142-28-9	106-46-7	594-20-7	95-49-8	106-43-4	71-43-2	108-86-1	74-97-5	75-27-4	75-25-2	56-23-5	108-90-7	75-00-3	67-66-3	156-59-2	10061-01-5
Residential Tot Soil Comb PCLs	120	36	250	61	1200	1600	120	390	3300	98	400	35	520	27000	16	140	8
Residential <sup>GW</sup> Soil <sub>Ing</sub> PCLs <sup>2</sup>	6.7	0.064	2.1	0.12	9.1	11	0.026	2.3	3	0.065	0.63	0.062	1.1	31	1	0.25	0.0066
Station Sample ID Ceet bgs Date Type										-							
MW-01 MW-01 (5) 5.0-5.0 6/21/2018 O	NA	NA	NA	NA	NA	NA	0.00018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-01   MW-01 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	NA	NA	NA	0.00018 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-02 MW-02 (1) 1.0-1.0 6/21/2018 O	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.000581 U	0.00116 U	0.00116 U	0.00348 U	0.00116 U	0.00116 U	0.000465 U
MW-02   MW-02 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-01 SB-01 (5) 5.0-5.0 6/22/2018 O	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.000529 U	0.00106 U	0.00106 U	0.00318 U	0.00106 U	0.00106 U	0.000424 U
SB-01 SB-01 (10) 10.0-10.0 6/22/2018 O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-02 SB-02 (5) 5.0-5.0 6/22/2018 O	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.000548 U	0.0011 U	0.0011 U	0.00329 U	0.0011 U	0.0011 U	0.000438 U
SB-02   SB-02 (9)   9.0-9.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-03 SB-03 (5) 5.0-5.0 6/22/2018 O	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.000529 U	0.00106 U	0.00106 U	0.00318 U	0.00106 U	0.00106 U	0.000423 U
SB-03   SB-03 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-04 SB-04 (5) 5.0-5.0 6/22/2018 O	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.000546 U	0.00109 U	0.00109 U	0.00328 U	0.00109 U	0.00109 U	0.000437 U
SB-04 SB-04 (10) 10.0-10.0 6/22/2018 O	NA NA	NA 0.00102.H	NA	NA 0.00102 H	NA 0.00102 H	NA 0.00102 H	NA 0.00102 II	NA	NA 0.00102 II	NA 0.00102.H	NA	NA 0.00102.H	NA 0.00102 H	NA	NA 0.00102 II	NA 0.00102 II	NA 0.00041 II
	0.00102 U	0.00102 U	0.00102 U	0.00102 U	0.00102 U	0.00102 U		0.00102 U	0.00102 U		0.000512 U	0.00102 U	0.00102 U	0.00307 U		0.00102 U	0.00041 U
SB-05 SB-05 (5) 5.0-5.0 6/22/2018 O	0.00117 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U		0.00117 U	0.00117 U		0.000586 U	0.00117 U	0.00117 U	0.00352 U	0.00117 U	0.00117 U	0.000469 U
SB-05   SB-05 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP direct contact protective concentration

bgs - below ground surface

NA - Not Analyzed U - Analyte not reported above the SDL



<sup>&</sup>lt;sup>2</sup>April 2018 TRRP soil to groundwater PCLs, 0.5-acre sou All values in milligrams per kilogram (mg/kg)

Analyte								VOCs								
Analyte	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane	Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl Bromide	Methyl Chloride	Methyl Ethyl Ketone	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Isopropyltoluene	sec-Butylbenzene
CAS.NO	124-48-1	74-95-3	75-71-8	100-41-4	98-82-8	108-38-3/106-42-3	74-83-9	74-87-3	78-93-3	75-09-2	91-20-3	104-51-8	103-65-1	95-47-6	99-87-6	135-98-8
Residential Tot Soil Comb PCLs 1	72	81	1400	6400	4300		46	140	40000	1600	220	3300	2200	48000	8200	3300
Residential <sup>GW</sup> Soil <sub>Ing</sub> PCLs <sup>2</sup>	0.049	1.1	240	7.6	350		0.13	0.41	29	0.013	31	150	45	71	230	85
Station Sample ID Depth (feet bgs) Date Type		-				1	1			-						
MW-01 MW-01 (5) 5.0-5.0 6/21/2018 O	NA	NA	NA	0.00026 U	NA	0.00065 U	NA	NA	NA	NA	NA	NA	NA	0.00024 U	NA	NA
MW-01   MW-01 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	0.00026 U	NA	0.00065 U	NA	NA	NA	NA	NA	NA	NA	0.00024 U	NA	NA
MW-02 MW-02 (1) 1.0-1.0 6/21/2018 O	0.00116 U	0.00116 U	0.00232 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00232 U	0.00116 U	0.000465 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U
MW-02   MW-02 (10)   10.0-10.0   6/21/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-01 SB-01 (5) 5.0-5.0 6/22/2018 O	0.00106 U	0.00106 U	0.00212 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00212 U	0.00106 U	0.000424 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U
SB-01   SB-01 (10)   10.0-10.0   6/22/2018   O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-02         SB-02 (5)         5.0-5.0         6/22/2018         O           SB-02         SB-02 (9)         9.0-9.0         6/22/2018         O	0.0011 U	0.0011 U	0.00219 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.00219 U	0.0011 U	0.000438 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
	NA 0.00106 U	NA 0.00106 U	NA 0.00212 U	NA 0.00106 U	NA 0.00106 U	NA 0.00106 H	NA	NA 0.00106 IJ	NA	NA	NA 0.000422 II	NA 0.00106 U	NA 0.00106 U	NA 0.00106 II	NA	NA 0.00106 II
SB-03 SB-03 (5) 5.0-5.0 6/22/2018 O SB-03 SB-03 (10) 10.0-10.0 6/22/2018 O	NA	0.00106 U NA	NA	NA	0.00106 U NA	0.00106 U NA	0.00106 U NA	0.00106 U NA	0.00212 U NA	0.00106 U NA	0.000423 U NA	NA	NA	0.00106 U NA	0.00106 U NA	0.00106 U NA
SB-04 SB-04 (5) 5.0-5.0 6/22/2018 O	0.00109 U	0.00109 U	0.00219 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00219 U	0.00109 U	0.000437 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U
SB-04 SB-04 (10) 10.0-10.0 6/22/2018 O	NA	NA	NA	NA	NA	0.00109 C NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
` /	0.00102 U	0.00102 U		0.00102 U	0.00102 U	0.00102 U	0.00102 U	0.00102 U	0.00205 U	0.00102 U	0.00041 U	0.00102 U	0.00102 U	0.00102 U	0.00102 U	
SB-05 SB-05 (5) 5.0-5.0 6/22/2018 O	0.00117 U	0.00117 U	0.00235 U	0.00117 U	0.00117 U	0.00117 U		0.00117 U	0.00235 U	0.00117 U	0.000469 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U
SB-05 SB-05 (10) 10.0-10.0 6/22/2018 O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP direct contact protective concentration



<sup>&</sup>lt;sup>2</sup>April 2018 TRRP soil to groundwater PCLs, 0.5-acre so

All values in milligrams per kilogram (mg/kg)

bgs - below ground surface

NA - Not Analyzed U - Analyte not reported above the SDL

		Analyte							V	OCs				
		Analyte			Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)
		CAS.NO			100-42-5	98-06-6	127-18-4	108-88-3	156-60-5	10061-02-6	79-01-6	75-69-4	75-01-4	1330-20-7
	Residentia		PCLs <sup>1</sup>		6700	3300	710	5900	590	36	18	25000	3.7	6000
	Residentia	ıl <sup>GW</sup> Soil <sub>Ing</sub> l	PCLs <sup>2</sup>		3.3	100	0.05	8.2	0.49	0.036	0.034	130	0.022	120
Station	Sample ID	Depth (feet bgs)	Date	Туре										
MW-01	MW-01 (5)	5.0-5.0	6/21/2018	О	NA	NA	NA	0.00026 U	NA	NA	NA	NA	NA	0.00087 U
MW-01	MW-01 (10)	10.0-10.0	6/21/2018	0	NA	NA	NA	0.00026 U	NA	NA	NA	NA	NA	0.00087 U
MW-02	MW-02 (1)	1.0-1.0	6/21/2018	0	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U	0.000465 U	0.00116 U	0.00116 U	0.00116 U	0.00116 U
MW-02	MW-02 (10)	10.0-10.0	6/21/2018	O	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-01	SB-01 (5)	5.0-5.0	6/22/2018	О	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.000424 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U
SB-01	SB-01 (10)	10.0-10.0	6/22/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-02	SB-02 (5)	5.0-5.0	6/22/2018	О	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U	0.000438 U	0.0011 U	0.0011 U	0.0011 U	0.0011 U
SB-02	SB-02 (9)	9.0-9.0	6/22/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-03	SB-03 (5)	5.0-5.0	6/22/2018	О	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U	0.000423 U	0.00106 U	0.00106 U	0.00106 U	0.00106 U
SB-03	SB-03 (10)	10.0-10.0	6/22/2018	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SB-04	SB-04 (5)	5.0-5.0	6/22/2018	0	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U	0.000437 U	0.00109 U	0.00109 U	0.00109 U	0.00109 U
SB-04	SB-04 (10)	10.0-10.0	6/22/2018	0	NA	NA	NA	NA	NA 0.00102.H	NA	NA	NA	NA	NA 0.00102 H
SB-04	SB-10 (5)	10.0-10.0	6/22/2018	DUP	0.00102 U	0.00102 U	0.00102 U		0.00102 U	0.00041 U	0.00102 U	0.00102 U	0.00102 U	
SB-05 SB-05	SB-05 (5) SB-05 (10)	5.0-5.0 10.0-10.0	6/22/2018	0	0.00117 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U	0.000469 U	0.00117 U	0.00117 U	0.00117 U	0.00117 U
Ļ	SB-05 (10)		6/22/2018	_	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP direct contact protective concentration



<sup>&</sup>lt;sup>2</sup>April 2018 TRRP soil to groundwater PCLs, 0.5-acre so

All values in milligrams per kilogram (mg/kg)

bgs - below ground surface

NA - Not Analyzed

U - Analyte not reported above the SDL

# Table E3 **Groundwater Metals and TPH Analytical Data** 3915 McKinney - Houston, Texas

A	Analyte								Meta	als							TPI	H 1005	
A	Analyte			Antimony	Arsenic	Barium	3eryllium	<b>Zadmium</b>	Chromium	ead	Vercury	Vickel	selenium	älver	Syanide	Petroleum Hydrocarbons (C06 to C12)	Petroleum Hydrocarbons >C12 to C28)	Petroleum Hydrocarbons (>C28 to C35)	Petroleum Hydrocarbons, Total (C06 to C35)
	CAS.NO			7440-36-0	7440-38-2	7440-39-3	7440-41-7	7440-43-9	7440-47-3	7439-92-1	7439-97-6	7440-02-0	7782-49-2	7440-22-4	57-12-5	TPH-1005-1	TPH-1005-2		TPH_C06-C35
Residential	I GWGWIng PC	CLs <sup>1</sup>		0.006	0.01	2	0.004	0.005	0.1	0.015	0.002	0.49	0.05	0.12	0.2	0.98	0.98	0.98	NP
Station	Sample ID	Date	Type		-					-	-			-	-				
MW-01	MW-1	6/26/2018	0	0.004 U	0.004 U	0.102	0.004 U	0.002 U	0.004 U	0.004 U	0.00006 U	0.01 J	0.004 U	0.001 U	0.01 U	0.59 U	0.77 U	0.68 U	0.77 U
MW-02	MW-12	6/26/2018	Dup	0.004 U	0.004 U	0.08	0.004 U	0.002 U	0.004 U	0.004 U	0.00006 U	0.015	0.004 J	0.001 U	0.01 U	NA	NA	NA	NA
MW-02	MW-2	6/26/2018	O	0.004 U	0.005 J	0.084	0.004 U	0.002 U	0.004 U	0.004 U	0.00006 U	0.015	0.004 U	0.001 U	0.01 U	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP groundwater ingestion protective concentration levels (PCLs)

All values in milligrams per liter (mg/L) **Bold** concentration reported at or above the sample detection limit (SDL)

NA - Not Analyzed NP - Not Published

U - Analyte not reported above the SDL

J - Analyte concentration is estimated



	Analyte									Po	lyaromatic	Hydrocarl	ons (PAH	(s)						
A	Analyte			Acenaphthene	Acenaphthylene	Anthracene	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene	Chrysene	Dibenzo(a,h)anthracene	Dibenzofuran	Fluoranthene	Fluorene	Indeno(1,2,3-cd)pyrene	Naphthalene	Phenanthrene	Pyrene
C	CAS.NO			83-32-9	208-96-8	120-12-7	56-55-3	50-32-8	205-99-2	191-24-2	207-08-9	218-01-9	53-70-3	132-64-9	206-44-0	86-73-7	193-39-5	91-20-3	85-01-8	129-00-0
Residentia	l <sup>GW</sup> GW <sub>Ing</sub> PC	CLs <sup>1</sup>		1.5	1.5	7.3	0.0091	0.0002	0.0091	0.73	0.091	0.91	0.0002	0.098	0.98	0.98	0.0091	0.49	0.73	0.73
Station	Sample ID	Date	Type					-			1						-			
MW-01	MW-1	6/26/2018	О	0.005 U	0.004 U	0.005 U	0.004 U	0.004 U	0.004 U	0.005 U	0.003 U	0.002 U	0.005 U	0.003 U	0.004 U	0.006 U	0.005 U	0.004 U	0.003 U	0.006 U
MW-02	MW-12	6/26/2018	Dup	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-02	MW-2	6/26/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP groundwater ingestion protective concentration levels (PCLs)

All values in milligrams per liter (mg/L)
NA - Not Analyzed

J - Analyte concentration is estimated



U - Analyte not reported above the SDL

	Analyte											Volati	ile Organic	Compoun	ds (VOCs)								
	Analyte			1,1,2-Tetrachloroethane	1,1-Trichloroethane	1,2,2-Tetrachloroethane	1,2-Trichloroethane	.1-Dichloroethane	,1-Dichloroethene	,1-Dichloropropene	,2,3-Trichlorobenzene	,2,3-Trichloropropane	,2,4-Trichlorobenzene	,2,4-Trimethylbenzene	1,2-Dibromo-3- chloropropane	,2-Dibromoethane	,2-Dichlorobenzene	,2-Dichloroethane	,2-Dichloropropane	,3,5-Trimethylbenzene	,3-Dichlorobenzene	3-Dichloropropane	,4-Dichlorobenzene
	CAS.NO			630-20-6	71-55-6	79-34-5	79-00-5	75-34-3	75-35-4	563-58-6	87-61-6	96-18-4	120-82-1	95-63-6		106-93-4	95-50-1	107-06-2	78-87-5	108-67-8	541-73-1	142-28-9	106-46-7
		NT1																					
	al GWGW <sub>Ing</sub> PC		I Trans	0.035	0.2	0.0046	0.005	4.9	0.007	0.0091	0.073	0.00003	0.07	0.83	0.0002	0.00005	0.6	0.005	0.005	0.83	0.73	0.0091	0.075
Station	Sample ID	Date	Type																				
MW-01	MW-1	6/26/2018	О	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-02	MW-12	6/26/2018	Dup	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
MW-02	MW-2	6/26/2018	0	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

<sup>1</sup>April 2018 TRRP groundwater ingestion protective concentration levels (PCLs) All values in milligrams per liter (mg/L)

**Bold** concentration reported at or above the sample detection limit (SDL)

NA - Not Analyzed

NP - Not Published

U - Analyte not reported above the SDL J - Analyte concentration is estimated



A	Analyte												VOCs									
	Analyte			1,4-Dioxane	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	Benzene	Bromobenzene	Bromochloromethane	Bromodichloromethane	Bromoform	Carbon disulfide	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromochloromethane	Dibromomethane	Dichlorodifluoromethane
	CAS.NO			123-91-1	594-20-7	95-49-8	106-43-4	71-43-2	108-86-1	74-97-5	75-27-4	75-25-2	75-15-0	56-23-5	108-90-7	75-00-3	67-66-3	156-59-2	10061-01-5	124-48-1	74-95-3	75-71-8
Residentia	l GWGWIng PC	CLs <sup>1</sup>		0.0091	0.013	0.49	0.49	0.005	0.2	0.98	0.015	0.12	2.4	0.005	0.1	9.8	0.24	0.07	0.0017	0.011	0.12	4.9
	Sample ID		Type								-											
MW-01	MW-1	6/26/2018	О	NA	NA	NA	NA	0.00035 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-02	MW-12	6/26/2018	Dup	0.084 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U
MW-02	MW-2	6/26/2018	О	0.084 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP groundwater ingestion protective concentrate All values in milligrams per liter (mg/L)

**Bold** concentration reported at or above the sample detection lin NA - Not Analyzed

NP - Not Published

U - Analyte not reported above the SDL J - Analyte concentration is estimated



1	Analyte											VOC	Cs								
	Analyte			Ethylbenzene	Isopropylbenzene	m,p-Xylene	Methyl Bromide	Methyl Chloride	Methyl Ethyl Ketone	Methylene chloride	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene	p-Isopropyltoluene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene
	CAS.NO			100-41-4	98-82-8	108-38-3/106-42-3	74-83-9	74-87-3	78-93-3	75-09-2	91-20-3	104-51-8	103-65-1	95-47-6	99-87-6	135-98-8	100-42-5	98-06-6	127-18-4	108-88-3	156-60-5
Residentia	l <sup>GW</sup> GW <sub>Ing</sub> PC	CLs <sup>1</sup>		0.7	2.4	NP	0.034	0.07	15	0.005	0.49	1.2	0.98	10	2.4	0.98	0.1	0.98	0.005	1	0.1
Station	Sample ID	Date	Type																		
MW-01	MW-1	6/26/2018	О	0.00487 J	NA	0.0006 U	NA	NA	NA	NA	NA	NA	NA	0.0025 U	NA	NA	NA	NA	NA	0.00028 U	NA
MW-02	MW-12	6/26/2018	Dup	0.00487 J	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.003 U	0.001 U	0.00389 U	0.001 U	0.001 U	0.001 U	0.001 U
MW-02	MW-2	6/26/2018	О	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.003 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP groundwater ingestion protective concentration

All values in milligrams per liter (mg/L)

**Bold** concentration reported at or above the sample detection lin NA - Not Analyzed

NP - Not Published

U - Analyte not reported above the SDL J - Analyte concentration is estimated



A	Analyte					VOCs		
	Analyte			trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl Chloride	Xylenes (Total)
	AS.NO			10061-02-6	79-01-6	75-69-4	75-01-4	1330-20-7
	I GW GW Ing PC	Ls		0.0091	0.005	7.3	0.002	10
Station	Sample ID	Date	Type		-	-		
MW-01	MW-1	6/26/2018	О	NA	NA	NA	NA	0.0082 U
MW-02	MW-12	6/26/2018	Dup	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U
MW-02	MW-2	6/26/2018	О	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U

<sup>&</sup>lt;sup>1</sup>April 2018 TRRP groundwater ingestion protective concentrate All values in milligrams per liter (mg/L)

**Bold** concentration reported at or above the sample detection lin

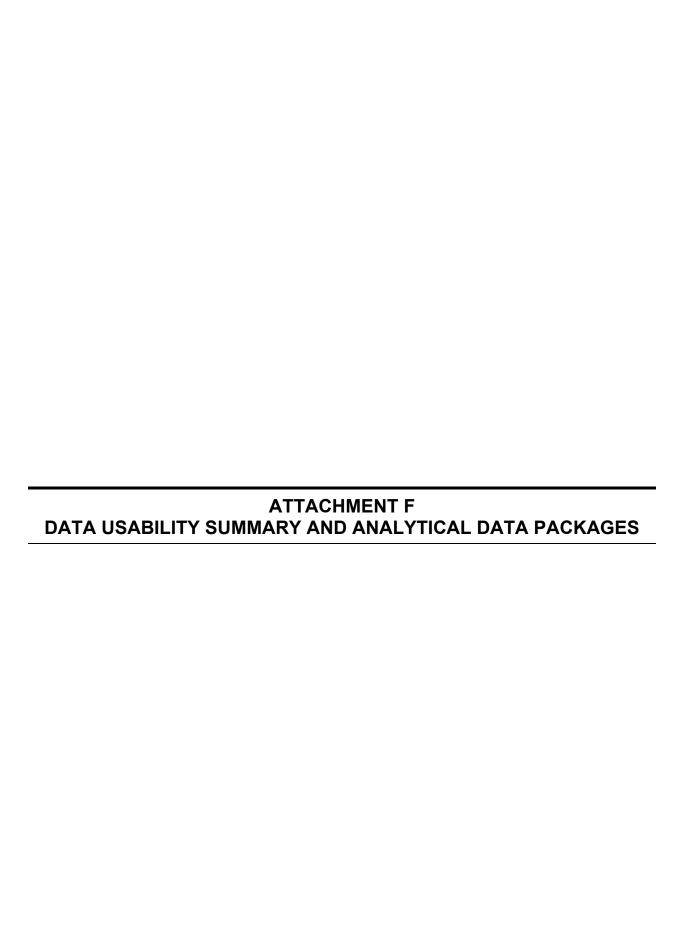
NA - Not Analyzed

NP - Not Published

U - Analyte not reported above the SDL

J - Analyte concentration is estimated





## **DATA USABILITY SUMMARY**

#### **FOR**

# 3915 McKINNEY STREET HOUSTON, TEXAS SITE

## PHASE II ENVIRONMENTAL SITE ASSESSMENT

**JUNE 21-26, 2018** 

Prepared by Nancy K. Toole ECS Environmental Chemistry Services PO Box 79782 Houston, Texas

Under Subcontract to:

**WESTON Solutions, Inc.** 5599 San Felipe, Suite 700 Houston, TX 77056-2721 (713) 985-6600

August 1, 2018

# TABLE OF CONTENTS

1.		LAC/TLAP LABORATORY ACCREDITATION CERTIFICATION ATEMENT	1
2. IN	INT	TRODUCTION	2
3.	DA'	TA REVIEW RESULTS	6
	3.1	VOLATILE ORGANIC COMPOUNDS AND AROMATIC VOLATILE ORGA COMPOUNDS (BTEX)	6
		3.1.3 GC/MS Instrument Tuning	7 8
	2.0	3.1.8 Surrogates 3.1.9 Matrix Spike/Matrix Spike Duplicates (MS/MSD) 3.1.10 Field Duplicates	9 9
	3.2	POLYNUCLEAR AROMATIC HYRDROCARBONS COMPOUNDS  3.2.1 Initial Calibration  3.2.2 Continuing Calibration  3.2.3 GC/MS Instrument Tuning  3.2.4 Internal Standards  3.2.5 Holding Times/Preservation Requirements  3.2.6 Blanks  3.2.7 Laboratory Control Samples (LCS)  3.2.8 Surrogates  3.2.9 Matrix Spike/Matrix Spike Duplicates (MS/MSD)  3.2.10 Field Duplicates	11 11 12 12 12 13
	3.3	TOTAL PETROLEUM HYDROCARBONS (TPH)  3.3.1 Initial Calibration 3.3.2 Continuing Calibration 3.3.3 Retention Time Window Calibration Check 3.3.4 Holding Time/Preservation Requirements 3.3.5 Blanks 3.3.6 Surrogates 3.3.7 Laboratory Control Sample (LCS) 3.3.8 Matrix Spike/Matrix Spike Duplicate Sample 3.3.9 Field Duplicates	14 15 15 15 15 16
	3.4	<del>-</del>	17

		3.4.3	Interference Check Solution	18
		3.4.4	Serial Dilution, Post Digestion Spike, Method of Standard	
			Additions	18
		3.4.5	Holding Time/Preservation Requirements	18
		3.4.6	Blanks	19
		3.4.7	Laboratory Control Sample (LCS)	19
		3.4.8	Matrix Spike Sample	19
		3.4.9	Field Duplicates	20
	3.5	MERO	CURY	21
		3.5.1	Initial Calibration	22
		3.5.2	Initial and Continuing Calibration Verification	22
			Holding Time/Preservation Requirements	
			Blanks	
		3.5.5	Laboratory Control Sample (LCS)	23
		3.5.6	Matrix Spike / Matrix Spike Sample	23
		3.5.7	Field Duplicates	24
	3.6	CYAN	NIDE	24
		3.6.1	Initial Calibration	25
		3.6.2	Initial and Continuing Calibration Verification	25
		3.6.3	Holding Time/Preservation Requirements	25
			Blanks	
		3.6.5	Laboratory Control Sample (LCS)	26
			Matrix Spike Sample	
		3.6.7	Field Duplicates	27
4.	DAT	A US	ABILITY RELATIVE TO PROJECT OBJECTIVES	28

# **APPENDICES**

- A Qualified TRRP Reports
- B Laboratory NELAP Accreditation Certificate

# 1. NELAC/TLAP LABORATORY ACCREDITATION CERTIFICATION STATEMENT

WESTON Solutions, Inc. certifies that at the time the laboratory data were generated for the sampling event, A & B Labs was NELAC accredited under the Texas Laboratory Accreditation Program (TLAP) for the matrices, methods, and parameters of analysis requested on the chain-of-custody form. A summary of the qualified data is presented in Appendix A. A & B Lab's TCEQ NELAP Accreditation Certificate is presented for the analytical period in Appendix B.

#### 2. INTRODUCTION

This Data Usability Summary (DUS) contains the results of the data review conducted by ECS Environmental Chemistry Services (ECS) for samples collected from the 3915 McKinney site in Houston, Texas during a sampling event conducted in June 21 through 26, 2018. A & B Labs in Houston, Texas analyzed the samples for the parameters listed in Table 2-1. Field quality control samples are identified in Table 2-2. Analytical data were evaluated for conformance to the requirements of the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Regulatory Guidance document 13 (TRRP 13).

The purpose of this project was to delineate constituent concentrations in site groundwaters and soils for a Phase II Environmental Site Assessment. The review process contained in this Data Usability Summary (DUS) includes an evaluation of the Laboratory Review Checklist (LRCs), Exception Reports (ERs) and reportable data for all data.

The data review criteria and results of the data review are covered for each analytical method in Section 3.0 of this report. The result of the data review process is the qualified data presented in Appendix A. The data were qualified using the qualifiers and bias codes presented in TRRP 13 and are presented in Appendix A of this report.

Section 4.0 presents an evaluation of the usability of the data for meeting the project objectives.

Table 2-1 3915 McKinney Site

# **Houston, Texas**

# Sample Summary

SDG	LAB	FIELD	DATE	MATRIX	PARAMETER
	SAMPLE ID	SAMPLE ID	COLL.		
1806280	18061280.01	MW-01 (5)	06/21/2018	Soil	BTEX, TPH
	18061280.02	MW-01 (10)	06/21/2018	Soil	BTEX, TPH
	18061280.03	MW-02 (1)	06/21/2018	Soil	MET, HG, VOL, CY
	18061280.04	MW-02 (10)	06/21/2018	Soil	MET, HG, CY
	18061280.05	TB-1	06/22/2018	Aqueous Blank	VOL
	18061280.06	SB-01 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.07	SB-01 (10)	06/22/2018	Soil	MET, HG, CY
	18061280.08	SB-02 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.09	SB-02 (9)	06/22/2018	Soil	MET, HG, CY
	18061280.10	SB-04 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.11	SB-04 (10)	06/22/2018	Soil	MET, HG, CY
	18061280.12	SB-10 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.13	SB-03 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.14	SB-03 (10)	06/22/2018	Soil	MET, HG, CY
	18061280.15	SB-05 (5)	06/22/2018	Soil	MET, HG, VOL, CY
	18061280.16	SB-05 (10)	06/22/2018	Soil	MET, HG, CY
	18061280.17	FB-1	06/22/2018	Aqueous Blank	VOL

SDG	LAB	FIELD	DATE	MATRIX	PARAMETER
	SAMPLE ID	SAMPLE ID	COLL.		
18061440	18061440.01	TB-2	06/26/2018	Aqueous Blank	VOL
	18061440.02	MW-1	06/26/2018	Groundwater	MET, HG, HEX CR, CY, BTEX, PAH, TPH
	18061440.03	MW-12	06/26/2018	Groundwater	MET, HG, HEX CR, CY, VOL
	18061440.04	MW-2	06/26/2018	Groundwater	MET, HG, HEX CR, CY, VOL
	18061440.05	FB-2	06/26/2018	Aqueous Blank	VOL

BTEX= benzene, toluene, ethylbenzene, xylenes by EPA Method SW-846 5035A/8260C (soil) and EPA Method SW-846 5030C/8260C (aqueous); TPH=Total Petroleum Hydrocarbons by TCEQ Method TX1005 (soil and aqueous); MET=Metals (antimony, arsenic, barium, beryllium, cadmium, chromium, lead, nickel, selenium, silver) by EPA Method SW-846 3050B/6010C (soil) and EPA Method 200.7 (aqueous); HG=Mercury by EPA Method SW-846 7470A (soil) and EPA Method 245.1 (aqueous); V=Volatile Organic Compounds by EPA Method SW-846 5035A/8260C (soil) and EPA Method SW-846 5030C/8260C (aqueous); CY=Cyanide by EPA Method SW-846 9010C/9014 (soil) and Standard Methods (SM) 4500CNC/E (aqueous); HEX CR= Hexavalent Chromium by Standard Methods Method SM3500 Cr B (aqueous); PAH=Polychlorinated aromatic hydrocarbons by EPA Method SW-846 3510C/8270D (aqueous)

# Table 2-2 3915 McKinney Site

# **Houston, Texas**

# Field Quality Control Sample Summary

SDG	LAB SAMPLE ID	FIELD SAMPLE ID	FIELD QC	ASSOCIATED SAMPLES
			SAMPLE TYPE	
4000000	400C4200 02 MC/CD	MAN OO (A) MC/CD	MC/MCD	40004000.00
1806280	18061280.03 MS/SD	MW-02 (1) MS/SD	MS/MSD	18061280.03
	18061280.05	TB-1	Trip Blank	18061280.01-04, 06-16
	18061280.15	SB-05 (5)	Field Duplicate	18061280.10
	18061280.13 MS/SD	SB-03 (5) MS/SD	MS/MSD	18061280.13
	18061280.17	FB-1	Field Blank	18061280.01-04, 06-16
18061440	18061440.01	TB-2	Trip Blank	18061440-02-04
	18061440.03	MW-12	Field Duplicate	18061440.04
	18061440.04 MS/SD	MW-2 MS/SD	MS/MSD	18061440.04
	18061440.05	FB-2	Field Blank	18061440-02-04

#### 3. DATA REVIEW RESULTS

# 3.1 VOLATILE ORGANIC COMPOUNDS AND AROMATIC VOLATILE ORGANIC COMPOUNDS (BTEX)

For volatile organic compound and volatile aromatic hydrocarbons (BTEX) data, the following items are reviewed in this section:

- Initial Calibration
- Continuing Calibration
- Instrument Tuning
- Internal Standards
- Holding Time/Preservation Requirements
- Blanks
- Laboratory Control Samples
- Surrogates
- Matrix Spike/Matrix Spike Duplicates
- Field Duplicates

#### 3.1.1 Initial Calibration

Initial Calibrations were performed at the proper frequency and met the criteria specified in the method. None of the volatile data were qualified based on initial calibration data.

#### 3.1.2 Continuing Calibration

Continuing Calibrations were performed at the proper frequency and met the criteria specified in the method. None of the volatile data were qualified based on continuing calibration data.

# 3.1.3 GC/MS Instrument Tuning

GC/MS instrument tunes for s met the ion abundance criteria specified in the method. GC/MS tunes were conducted at the proper frequency (1 every 12 hours) for this data set. None of the volatile data were qualified based on tuning data.

#### 3.1.4 Internal Standard

All internal standard area counts for reported data in this report were less than a factor of + OR-50% from the associated calibration standard. None of the volatile data were qualified based on internal standards.

# 3.1.5 Holding Times/Preservation Requirements

The maximum holding time from date of collection to date of analysis for in aqueous and solid matrix samples that have been preserved at a temperature of < or = 6°C (and kept at a pH of <2 for aqueous only samples) is 14 days. This holding time was met for all the samples in this data set. None of the volatile data were qualified based on holding time.

#### **3.1.6** Blanks

All associated blanks were free of all reported analytes in concentrations at or greater than the Sample Detection Limits (SDLs) with the following exceptions:

SDG	BLANK ID	ANALYTE	CONC	ASSOC SAMPLES QUALIFIED AS NON- DETECT
18061440	TB-2	Styrene	0.00356 mg/l	18061440.03

If a common laboratory contaminant (acetone, 2-butanone, cyclohexane, or methylene chloride) is detected in an associated sample at a concentration less than 10 times the concentration found in the blank, the sample data are qualified as not detected with a U qualifier. If any other volatile compound is detected in a blank and is also detected in an associated sample at a concentration less than 5 times the concentration found in the blank, the sample data are qualified as not detected for that compound. The samples listed above were qualified as not detect with a U qualifier.

# 3.1.7 Laboratory Control Samples (LCS)

The LCS review criteria for volatile data are as follows:

ACCURACY (%R)	PRECISION (RPD)
60%-140%	40%

One LCS was analyzed with each analytical batch. These criteria were met for all the samples in this data set. None of the volatile data were qualified based on LCS data.

# 3.1.8 Surrogates

The surrogate review criteria for volatile data are as follows:

ACCURACY (%R)
60%-140%

Each sample, standard and method blank was spiked with the appropriate surrogates. These criteria were met for all the samples in this data set. None of the volatile data were qualified based on surrogate data.

# 3.1.9 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

The MS/MSD review criteria for volatile data are as follows:

ACCURACY (%R)	PRECISION (RPD)
60%-140%	40%

MS/MSD analyses were analyzed at the proper frequency. These criteria were met for all the samples in this data set. None of the volatile data were qualified based on MS/MSD data.

# 3.1.10 Field Duplicates

For aqueous samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 30%. For aqueous samples, when one or both of the original and duplicate results are less than 5 times the MQL, the results agree within 2 times the greater MQL. For solid matrix samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL),

the Relative Percent Difference (RPD) was equal to or less than 50%. For solid matrix samples, when one or both the original and duplicate results are less than 5 times the MQL, the results agree within 3 times the greater MQL. The results of this evaluation of all detected results are shown in the following table:

SDG	FIELD DUP ID	ANALYTE	ORIGINAL RESULT	DUPLICATE RESULT	QC RESULT	CRITERIA
18061440	18061440- 03/04	Ethylbenzene	0.00487	0.001 U	DIF:0.00387	<=0.010

All volatile field duplicate results met data review criteria and did not required qualification.

#### 3.2 POLYNUCLEAR AROMATIC HYRDROCARBONS COMPOUNDS

For polynuclear aromatic hydrocarbons (PAH) data, the following items are reviewed in this section:

- Initial Calibration
- Continuing Calibration
- Instrument Tuning
- Internal Standard
- Holding Time/Preservation Requirements
- Blanks
- Laboratory Control Samples
- Surrogates

- Matrix Spike/Matrix Spike Duplicates
- Field Duplicates

The following sections specify the reasons for the data validation qualifiers that are presented in Appendix A.

#### 3.2.1 Initial Calibration

Initial Calibrations were performed at the proper frequency and met the criteria specified in the method. None of the PAH data were qualified based on initial calibration data.

## 3.2.2 Continuing Calibration

Continuing Calibrations were performed at the proper frequency and met the criteria specified in the method. None of the PAH data were qualified based on continuing calibration data.

## 3.2.3 GC/MS Instrument Tuning

GC/MS instrument tunes were performed at the proper frequency and met the ion abundance criteria specified in the method. None of the PAH data were qualified based on GC/MS tuning data.

#### 3.2.4 Internal Standards

All internal standard area counts for the samples in this report were less than a factor of + OR-50% from the associated calibration standard and were within retention time windows. None of the PAH data were qualified based on internal standard data.

#### 3.2.5 Holding Times/Preservation Requirements

The maximum holding time from date of collection to date of extraction for PAH in aqueous matrix samples that have been kept at a temperature of < or = 6°C is 7 days. The maximum holding time from date of extraction to date of analysis for PAH in aqueous matrix samples is 40 days. These holding times were met for all the samples in this data set. None of the PAH data were qualified based on holding times.

#### **3.2.6** Blanks

All associated blanks were free of all reported analytes in concentrations at or greater than the Sample Detection Limits (SDLs). None of the PAH data were qualified based on blank data.

## 3.2.7 Laboratory Control Samples (LCS)

The LCS review criteria for PAH data are as follows:

ACCURACY (%R)	PRECISION (RPD)
60%-140%	40%

One LCS/LCSD set was analyzed with every analytical batch. These criteria were met for all the LCS/LCSD in this data set. None of the PAH data were qualified based on LCS data.

# 3.2.8 Surrogates

The surrogate review criteria for PAH data are as follows:

ACCURACY (%R)
60%-140%

Each sample, standard and method blank was spiked with the appropriate surrogates. These criteria were met for all the samples in this data set. None of the PAH data were qualified based on surrogate data.

# 3.2.9 Matrix Spike/Matrix Spike Duplicates (MS/MSD)

A project sample MS/MSD was not analyzed for PAH.

# 3.2.10 Field Duplicates

A project sample field duplicate was not analyzed for PAH.

#### 3.3 TOTAL PETROLEUM HYDROCARBONS (TPH)

For TPH data, the following items are reviewed in this section:

- Initial Calibration;
- Continuing Calibration;
- Retention Time Window Check;
- Holding Time/Preservation Requirements;
- Blanks;
- Surrogates;
- Laboratory Control Sample;
- Matrix Spike/Matrix Spike Duplicate; and
- Field Duplicates.

The following sections specify the reasons for the data validation qualifiers that are presented in Appendix A.

#### 3.3.1 Initial Calibration

Initial Calibrations were performed prior to sample analysis and met the criteria specified in the method. None of the TPH data were qualified based on initial calibration data.

## 3.3.2 Continuing Calibration

Continuing Calibrations were performed daily before sample analysis. Continuing Calibration results were within 25 Relative Percent Difference of the Initial Calibration. None of the TPH data were qualified based on initial and calibration verification data.

#### 3.3.3 Retention Time Window Calibration Check

Retention times were checked once per analytical batch. The retention times met the criteria specified in the Laboratory SOP for this method. None of the TPH data were qualified based on retention time window data.

#### 3.3.4 Holding Time/Preservation Requirements

The maximum holding time from the date of collection to the date of extraction for 1005 TPH in aqueous and solid matrix samples is 14 days. The maximum holding time from date of extraction to date of analysis for 1005 TPH in aqueous and solid matrix samples is 14 days. These holding times were met for all the samples in this data set.

#### **3.3.5** Blanks

All associated lab blanks were free of all reported analytes in concentrations at or greater than the Sample Detection Limits (SDLs). None of the TPH data were qualified based on blank data.

#### 3.3.6 Surrogates

The surrogate review criteria for TPH data are as follows:

ACCURACY (%R)
60%-140%

Each sample, standard and method blank was spiked with the appropriate surrogates. These criteria were met for all the samples in this data set. None of the TPH data were qualified based on surrogate data.

# 3.3.7 Laboratory Control Sample (LCS)

The LCS review criteria for TPH data are as follows:

ACCURACY (%R)	PRECISION (RPD)
60%-140%	40%

One LCS was analyzed with each analytical batch. These criteria were met for all the samples in this data set. None of the TPH data were qualified based on LCS data.

# 3.3.8 Matrix Spike/Matrix Spike Duplicate Sample

A project sample MS/MSD was not analyzed for TPH.

# 3.3.9 Field Duplicates

A project sample field duplicate was not analyzed for TPH.

#### 3.4 METALS

For metal data, the following items are reviewed in this section:

- Initial Calibration;
- Initial and Continuing Calibration Verification;
- Internal Standard;
- Interference Check Sample (ICP/MS only);
- Serial Dilution, Post Digestion Spike, Method of Standard Addition;
- Holding Time/Preservation Requirements;
- Blanks;
- Laboratory Control Sample;
- Matrix Spike/ Matrix Spike Duplicate; and
- Field Duplicate.

The following sections specify the reasons for the data validation qualifiers that are presented in Appendix A.

#### 3.4.1 Initial Calibration

Initial Calibrations were performed daily prior to sample analysis. None of the metal data were qualified based on initial calibration data.

#### 3.4.2 Initial and Continuing Calibration Verification

Initial Calibration Verifications (ICV) were conducted daily after the initial calibration. Continuing calibration verifications (CCV) were conducted before the first sample run, after every 10 samples, and at the end of the analytical sequence. Initial and Continuing Calibrations Verification were within 10% of the expected value. None of the metal data were qualified based on ICV or CCV data.

#### 3.4.3 Interference Check Solution

All of the Interference Check Solutions (ICS) were conducted at the beginning of an analytical run or once during a 12-hour period, whichever was more frequent. All ICS were within 20% of the true value. None of the metal data were qualified based on ICS data.

## 3.4.4 Serial Dilution, Post Digestion Spike, Method of Standard Additions

The serial dilution, post digestion spike, and Method of Standard Additions (MSA) were performed, if needed, at the proper frequency and met the requirements set forth in the method. None of the metals were qualified based on these items.

# 3.4.5 Holding Time/Preservation Requirements

The maximum holding time from date of collection to date of analysis for metals in solid and aqueous matrix samples is 6 months.

The maximum holding time from date of collection to date of analysis for hexavalent chromium in aqueous matrix samples that have been kept at a temperature of < or = 6°C is 24 hours.

These holding times were met for all the samples in this data set.

## **3.4.6** Blanks

All associated lab blanks were free of all reported analytes in concentrations at or greater than the Sample Detection Limits (SDLs). None of the metal data were qualified based on blank data.

# 3.4.7 Laboratory Control Sample (LCS)

The LCS review criteria for metal data are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

One LCS was analyzed with each analytical batch. These criteria were met for the LCS in this data set. None of the metal data were qualified based on LCS data.

# 3.4.8 Matrix Spike Sample

The MS/MSD review criteria for metal data are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

One MS/MSD set was analyzed with every analytical batch. These criteria were met for all the MS/MSD in this data set with the following exceptions:

SDG	MS/MSD ID	ANALYTE	MS %R	CONT. LIMITS
18061280	18061280.03 MS/SD	Antimony	4%	70-130
		Barium	22%	70-130
		Lead	-11%	70-130

The parent samples for the MS listed above were qualified as follows:

	Detected results	Non-Detected Results
% R greater than 130%	JH	No qualification
% R less than 70% but greater than or equal to 30%	JL	UJL
% R less than 30%	JL	R

## 3.4.9 Field Duplicates

For aqueous samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 30%. For aqueous samples, when one or both of the original and duplicate results are less than 5 times the MQL, the results agree within 2 times the greater MQL. For solid matrix samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 50%. For solid matrix samples, when one or both the original and duplicate results are less than 5 times the MQL, the results agree within 3 times the greater MQL.

The results of this evaluation of all detected results are shown in the following table:

SDG	FIELD DUP ID	ANALYTE	ORIGINAL RESULT	DUPLICATE RESULT	QC RESULT	CRITERIA
18061280	18061280.10/15	Antimony	0.20	0.17	DIF: 0.030	<=0.927

SDG	FIELD DUP ID	ANALYTE	ORIGINAL RESULT	DUPLICATE RESULT	QC RESULT	CRITERIA
		Arsenic	1.70	1.33	DIF: 0.370	<=0.927
		Barium	236	173	RPD: 31%	<=50%
		Beryllium	0.676	0.725	DIF: 0.049	<=0.927
		Chromium	7.99	10.4	DIF: 26%	<=0.927
		Lead	15.7	7.13	DIF :8.57	<=17.8
		Nickel	6.89	4.46	DIF: 43%	<=0.927
		Selenium	0.17	0.12 U	DIF: 0.050	<=0.927
18061440	18061440- 03/04	Arsenic	0.004 U	0.005	DIF: 0.001	<=0.020
		Barium	0.080	0.084	RPD:5%	<=30%
		Nickel	0.015	0.015	DIF: 0	<=0.020
		Selenium	0.004	0.004 U	DIF: 0	<=0.020

All metal field duplicates met data review criteria and did not require qualification.

## 3.5 MERCURY

For mercury data, the following items are reviewed in this section:

- Initial Calibration;
- Initial and Continuing Calibration Verification;
- Holding Time/Preservation Requirements;
- Blanks;
- Laboratory Control Sample;

- Matrix Spike Sample;
- Matrix Duplicate Sample; and
- Field Duplicates.

The following sections specify the reasons for the data validation qualifiers that are presented in Appendix A.

### 3.5.1 Initial Calibration

Initial Calibrations were performed daily prior to sample analysis. None of the mercury data were qualified based on initial calibration data.

# 3.5.2 Initial and Continuing Calibration Verification

Initial Calibration Verifications (ICV) were conducted daily after the initial calibration. Continuing calibration verifications (CCV) were conducted before the first sample run, after every 10 samples, and at the end of the analytical sequence. Initial and Continuing Calibrations Verification were within 10% of the expected value. None of the mercury data were qualified based on ICV or CCV data.

# 3.5.3 Holding Time/Preservation Requirements

The maximum holding time from date of collection to date of analysis for mercury in aqueous and solid matrix samples that have been kept at a temperature of < or = 6°C (and kept at a pH of <2 for aqueous only samples) is 28 days. This holding time was met for all the samples in this data set. None of the mercury data were qualified based on holding times.

## **3.5.4** Blanks

All associated blanks were free of all reported analytes in concentrations at or greater than the SDL. None of the mercury data were qualified based on blank.

## 3.5.5 Laboratory Control Sample (LCS)

The LCS review criteria for mercury data are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

One LCS was analyzed with each analytical batch. These criteria were met for all the samples in this data set. None of the mercury metal data were qualified based on LCS data.

# 3.5.6 Matrix Spike / Matrix Spike Sample

The MS/MSD review criteria for mercury data when the sample concentration is less than 4 times the amount of spike added are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

The review criteria were met for the MS/MSD. None of the mercury data were qualified based on MS/MSD data.

## 3.5.7 Field Duplicates

For aqueous samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 30%. For aqueous samples, when one or both of the original and duplicate results are less than 5 times the MQL, the results agree within 2 times the greater MQL. For solid matrix samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 50%. For solid matrix samples, when one or both the original and duplicate results are less than 5 times the MQL, the results agree within 3 times the greater MQL.

The results of this evaluation of all detected results are shown in the following table:

SDG	FIELD DUP ID	ANALYTE	ORIGINAL RESULT	DUPLICATE RESULT	QC RESULT	CRITERIA
18061280	18061280.10/15	Mercury	0.00576	0.00702	DIF: 0.00126	<=0.147

All mercury field duplicate results met data review criteria and did not require qualification.

### 3.6 CYANIDE

For cyanide data, the following items are reviewed in this section:

- Initial Calibration;
- Initial and Continuing Calibration Verification;
- Holding Time/Preservation Requirements;
- Blanks;

- Laboratory Control Sample;
- Matrix Spike/ Matrix Spike Duplicate; and
- Field Duplicate.

The following sections specify the reasons for the data validation qualifiers that are presented in Appendix A.

### 3.6.1 Initial Calibration

Initial Calibrations were performed daily prior to sample analysis. None of the cyanide data were qualified based on initial calibration data.

# 3.6.2 Initial and Continuing Calibration Verification

Initial Calibration Verifications (ICV) were conducted daily after the initial calibration. Continuing calibration verifications (CCV) were conducted before the first sample run, after every 10 samples, and at the end of the analytical sequence. Initial and Continuing Calibrations Verification were within 10% of the expected value. None of the cyanide data were qualified based on ICV or CCV data.

# 3.6.3 Holding Time/Preservation Requirements

The maximum holding time from date of collection to date of analysis for cyanide in solid and aqueous matrix samples is 14 days. These holding times were NOT met for the following samples in this data set:

SDG	LAB SAMPLE ID	DAYS OVER THE MAXIMUM HOLDING TIME	QUALIFIER
18061280	18061280.03	11 days	JL
	18061280.04	11 days	UJL
	18061280.06	10 days	UJL
	18061280.07	10 days	UJL
	18061280.08	10 days	UJL
	18061280.09	10 days	UJL
	18061280.10	10 days	UJL
	18061280.11	10 days	UJL
	18061280.13	10 days	UJL
	18061280.14	10 days	UJL
	18061280.15	10 days	UJL
	18061280.16	10 days	UJL

The out of holding time cyanide results for the samples listed above were qualified as estimated with JL qualifiers for detects and UJL qualifiers for non-detects.

## **3.6.4** Blanks

All associated lab blanks were free of all reported analytes in concentrations at or greater than the Sample Detection Limits (SDLs). None of the cyanide data were qualified based on blank data.

# 3.6.5 Laboratory Control Sample (LCS)

The LCS review criteria for cyanide data are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

One LCS was analyzed with each analytical batch. These criteria were met for the LCS in this data set. None of the cyanide data were qualified based on LCS data.

# 3.6.6 Matrix Spike Sample

The MS/MSD review criteria for cyanide data are as follows:

ACCURACY (%R)	PRECISION (RPD)
70%-130%	30%

One MS/MSD set was analyzed with every analytical batch. These criteria were met for all the MS/MSD in this data set. None of the cyanide data were qualified based on MS/MSD data.

# 3.6.7 Field Duplicates

For aqueous samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 30%. For aqueous samples, when one or both of the original and duplicate results are less than 5 times the MQL, the results agree within 2 times the greater MQL. For solid matrix samples, when both the original and duplicate result are greater than 5 times the method quantitation limit (MQL), the Relative Percent Difference (RPD) was equal to or less than 50%. For solid matrix samples, when one or both the original and duplicate results are less than 5 times the MQL, the results agree within 3 times the greater MQL.

All cyanide field duplicate results met data review criteria and did not require qualification.

### 4. DATA USABILITY RELATIVE TO PROJECT OBJECTIVES

The purpose of this project was to delineate affected soils and groundwaters. This was accomplished by analyzing samples for the constituents of concern (COCs). The following is a discussion of qualified data and the potential impacts these qualified results have on the project objective.

<u>Metal Accuracy</u> – The following MS results did not meet data review criteria:

SDG	MS ID	COMPOUND	MS %R	ASSOC. RESULT (mg/kg)	PCL (mg/kg)	NOTE
18061280	18061280.03 MS/SD	Antimony	4%	0.12 R	5.4	1
		Barium	22%	81.0	440	2
		Lead	-11%	33.7	3.0	3

## NOTES:

1= The interpretation of this sample result is that the data were unusable and rejected due to the fact that the MD %R was below 30% and the reported result was no-detect.

2= The interpretation of this sample result, as being below the PCL, is not impacted by the low MS recovery because the sample result would still be below the PCL when the low recovery is taken into account.

3=The interpretation of this sample result, as being above the PCL, is not impacted by the low MS recovery because the sample result would still be above the PCL when the low recovery is taken into account.

<u>Cyanide Accuracy</u>- The interpretation of the cyanide results analyzed outside of holding times, as being below their associated PCL, do not appear to be impacted because the reported results ranged from 0.01 mg/kg U to 0.03 mg/kg. The reported concentrations are several orders of magnitude below the PCL of 40 mg/kg.

 EC	S Environment	al Chemistry	Services	
	APP	ENDIX A		

Table A-1

Qualified Analytical Data

FIELD SAMPLE	LAB SAMPLE	ANALYTE	DATA	REASON
ID	ID		VALIDATION QUALIFIER	
			40712111211	
18061280.03	MW-02 (1)	Antimony	R	MS%R was less than 30%R and original
	,			sample result was non-detect
		Barium	JL	MS%R was less than 30%R
		Lead	JL	MS%R was less than 30%R
		Cyanide	JL	Holding time exceeded
18061280.04	MW-02 (10)	Cyanide	UJL	Holding time exceeded
18061280.06	SB-01 (5)	Cyanide	UJL	Holding time exceeded
18061280.07	SB-01 (10)	Cyanide	UJL	Holding time exceeded
18061280.08	SB-02 (5)	Cyanide	UJL	Holding time exceeded
18061280.09	SB-02 (9)	Cyanide	UJL	Holding time exceeded
18061280.10	SB-04 (5)	Cyanide	UJL	Holding time exceeded
18061280.11	SB-04 (10)	Cyanide	UJL	Holding time exceeded
18061280.13	SB-03 (5)	Cyanide	UJL	Holding time exceeded
18061280.14	SB-03 (10)	Cyanide	UJL	Holding time exceeded
18061280.15	SB-05 (5)	Cyanide	UJL	Holding time exceeded
18061280.16	SB-05 (10)	Cyanide	UJL	Holding time exceeded
18061440.03	MW-12	Styrene	U	Trip Blank Contamination

#### AMENDED

# Laboratory Analysis Report

Job ID: 18061280



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

#### Client Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Report To:

Client Name: Attn:

Weston Solutions

Ryan Goss

Client Address:

5599 San Felipe Suite 700 City, State, Zip: Houston, Texas, 77056

P.O.# .: 0092142

Sample Collected By: Ryan Goss

Date Collected: 06/21/18 - 06/22/18

Total Number of Pages: 123

#### A&B Labs has analyzed the following samples...

Client Sample ID	Matrix	A&B Sample ID
MW-01 (5)	Soil	18061280.01
MW-01 (10)	Soil	18061280.02
MW-02 (1)	Soil	18061280.03
MW-02 (10)	Soil	18061280.04
TB-1	Water	18061280.05
SB-01 (5)	Soil	18061280.06
SB-01 (10)	Soil	18061280.07
SB-02 (5)	Soil	18061280.08
SB-02 (9)	Soil	18061280.09
SB-04 (5)	Soil	18061280.10
SB-04 (10)	Soil	18061280.11
SB-10 (5)	Soil	18061280.12
SB-03 (5)	Soil	18061280.13
SB-03 (10)	Soil	18061280.14
SB-05 (5)	Soil	18061280.15
SB-05 (10)	Soil	18061280.16
FB-1	Water	18061280.17

ausm Hugus

Released By: Alisha Hughes

Title: Date: Project Manager 7/31/2018



This Laboratory is NELAP (T104704213-18-17) accredited. Effective: 4/1/2018; Expires: 3/31/2019

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

Date Received: 06/22/2018 14:30 REVISED

Page 1 of 123

Report Number: RPT180731007 Revision of Report Number: RPT180731006

## LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 18061280

Date: 7/31/2018

General Term	Definition		
Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate
MSD	Matrix Spike Duplicate	T	Time
MW	Molecular Weight	TNTC	Too numerous to count
J	Estimation. Below calibration range but above	MDL	
Qualifier Defin	nition	- Control Control	
H1	Sample analysis performed past holding time	•	
H3	Sample was received and analyzed past hold	ing time.	
J	Estimation. Below calibration range but above	e MDL.	
L2	Associated LCS and/or LCSD recovery is bel	ow acceptance limits for	flagged analyte. Bias may be low.
M2	Matrix Spike and/or Matrix Spike Duplicate re randomly selected as QC for this batch was r samples."	covery is below laborate of part of your project.	ory control limits due to matrix interference."The sample Therefore, this sample matrix is not applicable to your project
МЗ	The accuracy of the spike recovery value is relevel. The LCS recovery is acceptable.	educed since the analyte	e concentration in the sample is disproportionate to spike
M9	Matrix Spike and/or Matrix Spike Duplicate re	covery is below laborate	ory control limits.
R1	RPD exceeds control limits."The sample rand matrix is not applicable to your project sample	lomly selcted as QC for es."	this batch was not part of your project. Therefore, this sample
U	Undetected at SDL (Sample Detection Limit).		



Client Sample ID: MW-01 (5) A&B Job Sample ID: 18061280.01 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:
Analytical Method:

**% Moisture** SM 2540G

QC Batch ID: Prep Method: Qb18062645 SM 2540G

Prepared By: Prep Batch ID SKYanduru PB18062615

**Analyst Initial** 

YSK

Sample Matrix Soil

Date Collected

06/21/2018 08:55

Date Received Date Prepared 06/22/2018 14:30

06/26/2018 07:00

% Moisture

13.2

CAS Numb	er Parameter
	% Moisture

Result Flag SDL 13.2

SQL MDL

MQL ÜQL

Units % DF Date/Time 1 06/26/18 07:02



Client Sample ID: MW-01 (5) A&B Job Sample ID: 18061280.01 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

**Purgeable Aromatics** 

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

Sample Matrix Soil Date Collected

06/21/2018 08:55 Date Received 06/22/2018 14:30 Date Prepared 06/23/2018 10:00

Prep Batch ID Analyst Initial

PB18062512

JKD

% Moisture

13.2

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
71-43-2	Benzene	<0.00018	U	0.00018	0.0029	0.00031	0.005	0.05	mg/Kg	0.51	06/24/18 18:22
108-88-3	Toluene	<0.00026	U	0.00026	0.0029	0.00044	0.005	0.05	mg/Kg	0.51	06/24/18 18:22
100-41-4	Ethylbenzene	<0.00026	U	0.00026	0.0029	0.00044	0.005	0.05	mg/Kg	0.51	06/24/18 18:22
108-38-3&106-4	m- & p-Xylenes	<0.00065	U	0.00065	0.0059	0.0011	0.010	0.10	mg/Kg	0.51	06/24/18 18:22
95-47-6	o-Xylene	<0.00024	U	0.00024	0.0029	0.00041	0.005	0.05	mg/Kg	0.51	06/24/18 18:22
1330-20-7	Xylenes	<0.00087	U	0.00087	0.0088	0.00148	0.015	0.15	mg/Kg	0.51	06/24/18 18:22
17060-07-0	1,2-Dichloroethane-d4	117					70	130 '	%	0.51	06/24/18 18:22
1868-53-7	Dibromofluoromethan	107					70	130	%	0.51	06/24/18 18:22
2037-26-5	Toluene-d8(surr)	99.2					70	130	%	0.51	06/24/18 18:22
460-00-4	p-Bromofluorobenzen	97.8					70	130	%	0.51	06/24/18 18:22

NW 8





Client Sample ID: MW-01 (5) A&B Job Sample ID: 18061280.01 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

QC Batch ID:

Total Petroleum Hydrocarbons

TX 1005 Qb18062622

Prep Method: Prepared By: Prep Batch ID

TX 1005 MKulkarni PB18062607

Analyst Initial

MMK

Sample Matrix Soil

Date Collected

Date Received

Date Prepared

06/21/2018 08:55

06/22/2018 14:30

06/25/2018 10:30

% Moisture

13.2

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
TPH-1005-1	C6-C12	<27.3	U	27.3	28.8	23.7	25	1000	mg/Kg	1	06/25/18 17:21
TPH-1005-2	>C12-C28	<23.4	U	23.4	28.8	20.3	25	1000	mg/Kg	1	06/25/18 17:21
TPH-1005-4	>C28-C35	<20.4	Ü	20.4	28.8	17.7	25	1000	mg/Kg	1	06/25/18 17:21
	Total C6-C35	< 27.3	U	27.3		23.7			mg/Kg	1	06/25/18 17:21
111-85-3	1-Chlorooctane(surr)	127					60	143	%	1	06/25/18 17:21
3386-33-2	Chlorooctadecane(sur	135					60	150	%	1	06/25/18 17:21

MY7 18



0.b

Client Sample ID: MW-01 (10) A&B Job Sample ID: 18061280.02

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: % Moisture
Analytical Method: SM 2540G
QC Batch ID: Qb18062645
Prep Method: SM 2540G
Prepared By: SKYanduru
Prep Batch ID PB18062615

Sample Matrix Soil
Date Collected 06/21/2
Date Received 06/22/2

06/21/2018 09:05 06/22/2018 14:30 06/26/2018 07:00

Analyst Initial YSK

% Moisture

Date Prepared

17.4

CAS Number	Parameter	Result	Flag SDL	SQL	MDL MQL	UQL	Units	DF	Date/Time
	% Moisture	17.4					%	1	06/26/18 07:02

ME1 18



Client Sample ID: MW-01 (10) A&B Job Sample ID: 18061280.02

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

**Purgeable Aromatics** 

Analytical Method: QC Batch ID: Prep Method:

SW-846 8260C Qb18062523 SW-846 5035A

Prepared By: Prep Batch ID

Jdongre PB18062512

Analyst Initial

JKD

Sample Matrix

Soil Date Collected

06/21/2018 09:05

Date Received Date Prepared 06/22/2018 14:30

06/23/2018 10:00

% Moisture

17.4

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
71-43-2	Benzene	<0.00018	U	0.00018	0.003	0.00031	0.005	0.05	mg/Kg	0.49	06/24/18 18:53
108-88-3	Toluene	<0.00026	U	0.00026	0.003	0.00044	0.005	0.05	mg/Kg	0.49	06/24/18 18:53
100-41-4	Ethylbenzene	<0.00026	U	0.00026	0.003	0.00044	0.005	0.05	mg/Kg	0.49	06/24/18 18:53
108-38-3&106-4	m- & p-Xylenes	<0.00065	U	0.00065	0.0059	0.0011	0.010	0.10	mg/Kg	0.49	06/24/18 18:53
95-47-6	o-Xylene	<0.00024	U	0.00024	0.003	0.00041	0.005	0.05	mg/Kg	0.49	06/24/18 18:53
1330-20-7	Xylenes	<0.00088	U	0.00088	0.0089	0.00148	0.015	0.15	mg/Kg	0.49	06/24/18 18:53
17060-07-0	1,2-Dichloroethane-d4	113					70	130	%	0.49	06/24/18 18:53
1868-53-7	Dibromofluoromethan	106					70	130	%	0.49	06/24/18 18:53
2037-26-5	Toluene-d8(surr)	98.3					70	130	%	0.49	06/24/18 18:53
460-00-4	p-Bromofluorobenzen	94.9					70	130	%	0.49	06/24/18 18:53

NK7 18





Client Sample ID: MW-01 (10) A&B Job Sample ID: 18061280.02 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: **Total Petroleum Hydrocarbons** 

Analytical Method: TX 1005 QC Batch ID: Qb18062622 Prep Method: TX 1005 Prepared By: MKulkarni Prep Batch ID PB18062607

Analyst Initial MMK Date Collected

Sample Matrix

06/21/2018 09:05 Date Received 06/22/2018 14:30 Date Prepared

Soil

06/25/2018 10:30

% Moisture

and the same of th											
CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
TPH-1005-1	C6-C12	<27.8	U	27.8	29.4	23.7	25	1000	mg/Kg	0.97	06/25/18 17:50
TPH-1005-2	>C12-C28	<23.8	U	23.8	29.4	20.3	25	1000	mg/Kg	0.97	06/25/18 17:50
TPH-1005-4	>C28-C35	<20.8	U	20.8	29.4	17.7	25	1000	mg/Kg	0.97	06/25/18 17:50
	Total C6-C35	< 27.8	U	27.8		23.7			mg/Kg	0.97	06/25/18 17:50
111-85-3	1-Chlorooctane(surr)	121					60	143	%	0.97	06/25/18 17:50
3386-33-2	Chlorooctadecane(sur	126					60	150	%	0.97	06/25/18 17:50

MK1 (8



Client Sample ID: MW-02 (1)

A&B Job Sample ID: 18061280.03

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

% Moisture

Analytical Method:

SM 2540G

QC Batch ID: Prep Method:

Qb18062645 SM 2540G

Prepared By:

SKYanduru PB18062615

Prep Batch ID

Sample Matrix

Soil

Date Collected

06/21/2018 11:10

Date Received Date Prepared 06/22/2018 14:30

06/26/2018 07:00

**Analyst Initial** 

YSK

% Moisture

18.2

CAS Numb	oer Parameter	Result	Flag SDL	SQL MDI	L MQL	UQL	Units	DF	Date/Time
	% Moisture	18.2					%	1	06/26/18 07:02

MC7 18



Client Sample ID: MW-02 (1) A&B Job Sample ID: 18061280.03 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

**Total Metals** SW-846 6010C

QC Batch ID: Prep Method:

Qb18062808 SW-846 3050B

Prepared By: Prep Batch ID

Mwissman PB18062650

Analyst Initial CAS

Sample Matrix

Soil

Date Collected Date Received 06/21/2018 11:10 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture

18.2

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony R	<0.12	U	0.12	0.306	0.1	0.25	125	mg/Kg	1	06/27/18 21:51
7440-38-2	Arsenic	1.13		0.12	0.306	0.1	0.25	125	mg/Kg	1	06/27/18 21:51
7440-39-3	Barium JL	81.0		2.44	6.11	0.1	0.25	125	mg/Kg	20	06/28/18 15:29
7440-41-7	Beryllium	0.47		0.12	0.306	0.1	0.25	125	mg/Kg	1	06/27/18 21:51
7440-43-9	Cadmium	<0.05	U	0.05	0.306	0.04	0.25	125	mg/Kg	1	06/27/18 21:51
7440-47-3	Chromium	9.57		0.12	0.306	0.1	0.25	125	mg/Kg	1	06/27/18 21:51
7439-92-1	Lead FIL	33.7		2.44	6.11	0.1	0.25	125	mg/Kg	20	06/27/18 21:56
7440-02-0	Nickel	12100		24.4	61.1	0.1	0.25	125	mg/Kg	200	06/28/18 14:51
7782-49-2	Selenium	<0.12	U	0.12	0.306	0.1	0.25	125	mg/Kg	1	06/27/18 21:51
7440-22-4	Silver	<0.02	U	0.02	0.306	0.02	0.25	125	mg/Kg	1	06/27/18 21:51

731.18

Client Sample ID: MW-02 (1)

A&B Job Sample ID: 18061280.03

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Total Metals - Mercury

Analytical Method: SW-846 7470A QC Batch ID: Qb18062580 Prep Method: SW-846 7470A

Prepared By: Prep Batch ID JYou PB18062557

Analyst Initial

CAS

Sample Matrix

Soil Date Collected

Date Received Date Prepared 06/21/2018 11:10 06/22/2018 14:30

06/25/2018 11:00

Date/Time

06/25/18 16:31

% Moisture

18.2

Parameter CAS Number Result Flag SDL SQL MDL MQL UQL Units DF 1 7439-97-6 0.133 0.00108 0.0049 0.00088 0.004 0.2 mg/Kg Mercury

MV31-18



Client Sample ID: MW-02 (1) A&B Job Sample ID: 18061280.03

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

Sample Matrix Soil

Date Collected 06/21/2018 11:10 Date Received 06/22/2018 14:30 Date Prepared

Prep Batch ID

PB18062512

JKD

06/23/2018 10:00

Analyst Initial

% Moisture 18.2

1,1,1-Trichloroethane	CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
1,1,2,2-Tetrachloroet   0,00116   U   0,00116   0,0058   0,001   0,005   0,058   mg/kg   0,95   06/24/18   19:23     79-00-5   1,1,2-Trichloroethane   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-34-3   1,1-Dichloroethylene   0,000126   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-35-4   1,1-Dichloroethylene   0,000232   U   0,00232   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-35-6   1,1-Dichloroethylene   0,000126   U   0,00116   U   0,0016   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-6   1,2,3-Trichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-6   1,2,4-Trichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-6   1,2,4-Trichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-6   1,2,4-Trichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-7   1,2-Dichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-8   1,2-Dichlorobenzen   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-9   1,2-Dichlorobenzene   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-36-9   1,2-Dichlorobenzene   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-37-1   1,3-Dichlorobenzene   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-37-1   1,3-Dichlorobenzene   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-38-7   1,3-Dichlorobenzene   0,00116   U   0,00116   0,0058   0,001   0,005   0,05   mg/kg   0,95   06/24/18   19:23     75-39-3   1,4-Dichlorobenzene   0,00116	630-20-6	1,1,1,2-Tetrachioroet	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
1,1,2-Trichloroethane	71-55-6	1,1,1-Trichloroethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
1,1-Dichloroethylene	79-34-5	1,1,2,2-Tetrachloroet	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-35-4	79-00-5	1,1,2-Trichloroethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
653-58-6         1,1-Dichloropropene         < 0.00116	75-34-3	1,1-Dichloroethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
87-61-6	75-35-4	1,1-Dichloroethylene	<0.00232	U	0.00232	0.0058	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
96-18-4 1,2,3-Trichloropropan <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 120-82-1 1,2,4-Trichlorobenzen <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 166-93-4 1,2-Dibromo-3-chloro <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 166-93-4 1,2-Dibromoethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-67-8 1,3-5-Trimethylbenze <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 142-28-9 1,3-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 142-28-9 1,3-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 142-28-9 1,3-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 166-46-7 1,4-Dichloropenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 195-49-8 2-Chlorobluene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 106-43-4 4-Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 106-43-4 4-Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 106-43-4 4-Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-86-1 Bromoehrane <0.00116 U 0.0016 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-86-1 Bromoehrane <0.00116 U 0.0016 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-86-1 Bromoehrane <0.00116 U 0.0016 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-86-1 Bromoehrane <0.00116 U 0.0016 0.0058 0.001 0.005 0.05 mg/kg 0.95 06/24/18 19:23 108-86-1 Bromoehrane <0.00116 U 0.0016	563-58-6	1,1-Dichloropropene	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
120-82-1 1,2,4-Trichlorobenzen < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 95-63-6 1,2,4-Trimethylbenze < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 96-12-8 1,2-Dibromo-3-chloro < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 95-50-1 1,2-Dibromo-banne < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 107-06-2 1,2-Dichloropenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-67-5 1,2-Dichloropenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-67-8 1,3-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-67-8 1,3-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-67-8 1,3-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 142-28-9 1,3-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 106-46-7 1,4-Dichlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 106-48-4 4-Chlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 106-43-4 4-Chlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 106-43-4 4-Chlorobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene < 0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-80-1 Bromobenzene	87-61-6	1,2,3-trichlorobenzen	<0.00232	U	0.00232	0.0058	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
95-63-6 1,2,4-Trimethylbenze	96-18-4	1,2,3-Trichloropropan	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
96-12-8 1,2-Dibromo-3-chloro	120-82-1	1,2,4-Trichlorobenzen	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
106-93-4 1,2-Dibromoethane	95-63-6	1,2,4-Trimethylbenze	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
95-50-1 1,2-Dichlorobenzene	96-12-8	1,2-Dibromo-3-chloro	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
107-06-2         1,2-Dichloroethane         <0.00116	106-93-4	1,2-Dibromoethane	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
78-87-5         1,2-Dichloropropane         <0.00116	95-50-1	1,2-Dichlorobenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
108-67-8         1,3,5-Trimethylbenze         < 0.00116	107-06-2	1,2-Dichloroethane	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
541-73-1         1,3-Dichlorobenzene         <0.00116	78-87-5	1,2-Dichloropropane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
142-28-9         1,3-Dichloropropane         <0.00116	108-67-8	1,3,5-Trimethylbenze	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
106-46-7         1,4-Dichlorobenzene         < 0.00116	541-73-1	1,3-Dichlorobenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
594-20-7         2,2-Dichloropropane         <0.00116	142-28-9	1,3-Dichloropropane	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
95-49-8 2-Chlorotoluene	106-46-7	1,4-Dichlorobenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
106-43-4         4-Chlorotoluene         <0.00116	594-20-7	2,2-Dichloropropane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
99-87-6 4-Isopropyltoluene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 71-43-2 Benzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-86-1 Bromobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-97-5 Bromochloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-27-4 Bromodichloromethan <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-25-2 Bromoform <0.00058 U 0.00058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-83-9 Bromomethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 56-23-5 Carbon tetrachloride <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-90-7 Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00348 U 0.00348 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroform <0.00348 U 0.00348 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00348 U 0.00348 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	95-49-8	2-Chlorotoluene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
71-43-2         Benzene         <0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/kg         0.95         06/24/18 19:23           108-86-1         Bromobenzene         <0.00116	106-43-4	4-Chlorotoluene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
108-86-1         Bromobenzene         < 0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 19:23           74-97-5         Bromochloromethane         < 0.00116	99-87-6	4-Isopropyltoluene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
74-97-5         Bromochloromethane         < 0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 19:23           75-27-4         Bromodichloromethan         < 0.00116	71-43-2	Benzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-27-4 Bromodichloromethan <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-25-2 Bromoform <0.00058 U 0.00058 0.0058 0.0005 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-83-9 Bromomethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 56-23-5 Carbon tetrachloride <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-90-7 Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00348 U 0.00348 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 67-66-3 Chloroform <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	108-86-1	Bromobenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-25-2 Bromoform <0.00058 U 0.00058 0.0058 0.0005 0.005 0.005 mg/Kg 0.95 06/24/18 19:23 74-83-9 Bromomethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 56-23-5 Carbon tetrachloride <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 108-90-7 Chlorobenzene <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 75-00-3 Chloroethane <0.00348 U 0.00348 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 67-66-3 Chloroform <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	74-97-5	Bromochloromethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
74-83-9         Bromomethane         <0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 19:23           56-23-5         Carbon tetrachloride         <0.00116	75-27-4	Bromodichloromethan	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
56-23-5         Carbon tetrachloride         < 0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 19:23           108-90-7         Chlorobenzene         < 0.00116	75-25-2	Bromoform	<0.00058	U	0.00058	0.0058	0.0005	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
108-90-7         Chlorobenzene         < 0.00116         U         0.00116         0.0058         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 19:23           75-00-3         Chloroethane         < 0.00348	74-83-9	Bromomethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-00-3 Chloroethane <0.00348 U 0.00348 0.0058 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 67-66-3 Chloroform <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	56-23-5	Carbon tetrachloride	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
67-66-3 Chloroform <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	108-90-7	Chlorobenzene	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
67-66-3 Chloroform <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23 74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	75-00-3	Chloroethane	<0.00348	U	0.00348	0.0058	0.003	0.005	0.05		0.95	
74-87-3 Chloromethane <0.00116 U 0.00116 0.0058 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 19:23	67-66-3	Chloroform		U	0.00116	0.0058			0.05		0.95	
3, 3	74-87-3	Chloromethane	<0.00116	U		0.0058	0.001	0.005	0.05	0. 0	0.95	
	156-59-2			U								

**REVISED** 

Soil results reported on dry weight fa

Page 12 of 123



Client Sample ID: MW-02 (1)

A&B Job Sample ID: 18061280.03

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A

Prepared By: Prep Batch ID

Jdongre PB18062512

Analyst Initial

JKD

Sample Matrix Soil

Date Collected 06/21/2018 11:10 Date Received 06/22/2018 14:30

Date Prepared 06/23/2018 10:00

% Moisture 18.2

									3070 PH 307 (14)		CONTRACTOR OF THE PROPERTY OF
CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00046	U	0.00046	0.0058	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
124-48-1	Dibromochloromethan	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
74-95-3	Dibromomethane	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-71-8	Dichlorodifluorometha	<0.00232	U	0.00232	0.0058	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
100-41-4	Ethylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
98-82-8	Isopropylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
108-38-3&106-4	m- & p-Xylenes	<0.00116	U	0.00116	0.012	0.001	0.01	0.1	mg/Kg	0.95	06/24/18 19:23
78-93-3	MEK	<0.00232	U	0.00232	0.0058	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-09-2	Methylene chloride	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
91-20-3	Naphthalene	<0.00046	U	0.00046	0.0058	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
104-51-8	n-Butylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
103-65-1	n-Propylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
95-47-6	o-Xylene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
135-98-8	sec-Butylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
100-42-5	Styrene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
98-06-6	t-butylbenzene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
127-18-4	Tetrachloroethylene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
108-88-3	Toluene	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
156-60-5	trans-1,2-Dichloroethy	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
10061-02-6	trans-1,3-Dichloropro	<0.00046	U	0.00046	0.0058	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
79-01-6	Trichloroethylene	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-69-4	Trichlorofluoromethan	<0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
75-01-4	Vinyl Chloride	< 0.00116	U	0.00116	0.0058	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 19:23
1330-20-7	Xylenes	<0.00116	U	0.00116	0.0058	0.001	0.005	0.15	mg/Kg	0.95	06/24/18 19:23
17060-07-0	1,2-Dichloroethane-d4	116					70	130	%	0.95	06/24/18 19:23
1868-53-7	Dibromofluoromethan	107					70	130	%	0.95	06/24/18 19:23
2037-26-5	Toluene-d8(surr)	98.9					70	130	%	0.95	06/24/18 19:23
460-00-4	p-Bromofluorobenzen	100					70	130	%	0.95	06/24/18 19:23

7-31-18



Client Sample ID: MW-02 (1) A&B Job Sample ID: 18061280.03 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

**Total Cyanide** 

Analytical Method: QC Batch ID:

SW-846 9014 Qb18071645

Prep Method:

SW-846 9010C

Prepared By: Prep Batch ID

LEBell PB18071629

Analyst Initial

LEB

Sample Matrix

Soil

Date Collected Date Received 06/21/2018 11:10 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture

18.2

CAS Number	Paramete	er	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	JL	0.03	H3,3	0.01	0.122	0.01	0.1	2	mg/Kg	1	07/16/18 11:00



Client Sample ID: MW-02 (10) A&B Job Sample ID: 18061280.04

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:
Analytical Method:

% Moisture SM 2540G Qb18062645

QC Batch ID: Prep Method: Prepared By:

SM 2540G SKYanduru PB18062615

Prep Batch ID

Analyst Initial

YSK

% Moisture

Sample Matrix Soil

Date Collected

06/21/2018 11:17

Date Received
Date Prepared

06/22/2018 14:30 06/26/2018 07:00

% Moisture 1

15.4

CAS Number Parameter

Result Flag SDL 15.4 MDL

SQL

MQL UQL

Units % DF Date/Time
1 06/26/18 07:02



Client Sample ID: MW-02 (10) A&B Job Sample ID: 18061280.04 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: QC Batch ID:

Prep Method:

**Total Metals** SW-846 6010C Qb18062808 SW-846 3050B

Prepared By: Mwissman Prep Batch ID PB18062650

Analyst Initial

CAS

Sample Matrix

Date Collected Date Received

Date Prepared

06/21/2018 11:17 06/22/2018 14:30

06/26/2018 13:10

% Moisture

15.4

Soil

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.43		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7440-38-2	Arsenic	4.09		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7440-39-3	Barium	600		2.36	5.91	0.1	0.25	125	mg/Kg	20	06/28/18 15:33
7440-41-7	Beryllium	0.668		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7440-43-9	Cadmium	<0.05	U	0.05	0.296	0.04	0.25	125	mg/Kg	1	06/27/18 22:00
7440-47-3	Chromium	10.4		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7439-92-1	Lead	6.18		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7440-02-0	Nickel	36.3		2.36	5.91	0.1	0.25	125	mg/Kg	20	06/27/18 22:04
7782-49-2	Selenium	0.36		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/27/18 22:00
7440-22-4	Silver	0.03	J	0.02	0.296	0.02	0.25	125	mg/Kg	1	06/27/18 22:00

MK7.31.18



Client Sample ID: MW-02 (10) A&B Job Sample ID: 18061280.04 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: Total Metals - Mercury

Analytical Method: SW-846 7470A

Qb18062580

QC Batch ID: Prep Method:

SW-846 7470A

Prepared By:

JYou

Prep Batch ID

PB18062557

Analyst Initial

CAS

Sample Matrix

Soil Date Collected

06/21/2018 11:17

Date Received Date Prepared

06/22/2018 14:30

06/25/2018 11:00

% Moisture

15.4

CAS Number	Parameter	Result Flag	SDL SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	<0.00104 U	0.00104 0.004	7 0.00088	0.004	0.2	mg/Kg	1	06/25/18 16:34

nk7 1-31-18



Client Sample ID: MW-02 (10) A&B Job Sample ID: 18061280.04 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: **Total Cyanide** SW-846 9014 Qb18071645

QC Batch ID: Prep Method: Prepared By:

SW-846 9010C LEBell Prep Batch ID PB18071629

Analyst Initial

LEB

Sample Matrix

Soil Date Collected

Date Received

06/21/2018 11:17 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture

15.4

CAS Number	Paramete	r	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	VJL	<0.01	H3,U	0.01	0.118	0.01	0.1	2	mg/Kg	1	07/16/18 11:00



Client Sample ID: TB-1

A&B Job Sample ID: 18061280.05

Date: 7/31/2018

Water

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

**Volatile Organic Compounds** 

Analytical Method:
QC Batch ID:
Prep Method:

SW-846 8260C Qb18062530 SW-846 5030C

Prepared By: Prep Batch ID Jdongre PB18062520

Analyst Initial

JKD

Sample Matrix

Date Collected

Date Received Date Prepared

06/22/2018 14:30

06/23/2018 10:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
79-34-5	1,1,2,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
79-00-5	1,1,2-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-35-4	1,1-Dichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
87-61-6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
96-12-8	1,2-Dibromo-3-chloro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
106-93-4	1,2-Dibromoethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
95-50-1	1,2-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
78-87-5	1,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
108-67-8	1,3,5-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
142-28-9	1,3-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
106-46-7	1,4-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/24/18 06:48
594-20-7	2,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
95-49-8	2-Chlorotoluene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
106-43-4	4-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/24/18 06:48
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
74-97-5	Bromochloromethane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-27-4	Bromodichloromethan	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-25-2	Bromoform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
74-83-9	Bromomethane	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/24/18 06:48
75-15-0	Carbon disulfide	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
56-23-5	Carbon tetrachloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
108-90-7	Chlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-00-3	Chloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
67-66-3	Chloroform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48

**REVISED** 

Soil results reported on dry weight basis

Page 19 of 123



Client Sample ID: TB-1

A&B Job Sample ID: 18061280.05

Client Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX Project Name:

Date: 7/31/2018

Attn: Ryan Goss

Test Description: **Volatile Organic Compounds** 

Analytical Method: SW-846 8260C QC Batch ID: Qb18062530 Prep Method: SW-846 5030C Prepared By: Jdongre Prep Batch ID PB18062520

Analyst Initial JKD Sample Matrix Water

**Date Collected** 

Date Received 06/22/2018 14:30

Date Prepared 06/23/2018 10:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	. 0.001	0.005	0.05	mg/L	1	06/24/18 06:48
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
74-95-3	Dibromomethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-71-8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/24/18 06:48
100-41-4	Ethylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/24/18 06:48
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/24/18 06:48
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
103-65-1	n-Propylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
95-47-6	o-Xylene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
100-42-5	Styrene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
98-06-6	t-butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
156-60-5	trans-1,2-Dichloroethy	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-69-4	Trichlorofluoromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
75-01-4	Vinyl Chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 06:48
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/24/18 06:48
17060-07-0	1,2-Dichloroethane-d4	107					70	130	%	1	06/24/18 06:48
1868-53-7	Dibromofluoromethan	106					70	130	%	1	06/24/18 06:48
2037-26-5	Toluene-d8(surr)	100					70	130	%	1	06/24/18 06:48
460-00-4	p-Bromofluorobenzen	99.5					70	130	%	1	06/24/18 06:48





Client Sample ID: SB-01 (5)

A&B Job Sample ID: 18061280.06

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

% Moisture Analytical Method: SM 2540G

QC Batch ID: Prep Method: Qb18062645 SM 2540G

Prepared By: Prep Batch ID SKYanduru PB18062615

Analyst Initial

YSK

Sample Matrix Soil

Date Collected

06/22/2018 08:50 06/22/2018 14:30

Date Received Date Prepared

06/26/2018 07:00

% Moisture

16.9

CAS Number Parameter	Result Flag	SDL	SQL MDL	MQL	UQL	Units	DF	Date/Time
% Moisture	16.9					%	1	06/26/18 07:02



Client Sample ID: SB-01 (5)
A&B Job Sample ID: 18061280.06

Date: 7/31/2018

Client Name:

Prep Batch ID

Weston Solutions

PB18062650

Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Soil

Test Description: Total Metals Sample Matrix

Analytical Method: SW-846 6010C Date Collected 06/22/2018 08:50 QC Batch ID: Qb18062808 Date Received 06/22/2018 14:30

 QC Batch ID:
 Qb18062808
 Date Received
 06/22/2018 14:30

 Prep Method:
 SW-846 3050B
 Date Prepared
 06/26/2018 13:10

 Prepared By:
 Mwissman

Analyst Initial CAS % Moisture 16.9

SDL **SQL** MDL MQL UQL Units CAS Number Parameter Result Flag DF Date/Time IJ 0.12 0.25 125 7440-36-0 Antimony <0.12 0.301 0.1 mg/Kg 1 06/27/18 22:08 0.888 0.12 0.301 0.1 0.25 7440-38-2 Arsenic 125 mg/Kg 1 06/27/18 22:08 7440-39-3 Barium 126 2.41 6.02 0.1 0.25 125 mg/Kg 20 06/28/18 15:37 7440-41-7 Beryllium 0.680 0.12 0.301 0.1 0.25 125 mg/Kg 1 06/27/18 22:08 0.05 0.25 7440-43-9 Cadmium <0.05 IJ 0.301 0.04 125 mg/Kg 1 06/27/18 22:08 7440-47-3 Chromium 6.89 0.12 0.301 0.1 0.25 125 mg/Kg 1 06/27/18 22:08 7439-92-1 Lead 6.79 0.12 0.301 0.1 0.25 125 mg/Kg 1 06/27/18 22:08 7440-02-0 Nickel 3.65 0.12 0.301 0.25 125 0.1 mg/Kg 1 06/27/18 22:08 Selenium U 0.12 0.301 0.25 125 7782-49-2 < 0.12 0.1 mg/Kg 1 06/27/18 22:08 < 0.02 IJ 7440-22-4 Silver 0.02 0.301 0.02 0.25 125 mg/Kg 1 06/27/18 22:08

MK7 18



Client Sample ID: SB-01 (5) A&B Job Sample ID: 18061280.06 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Result

0.00799

Flag

SDL

SQL

0.00106 0.0048

MDL

0.00088 0.004

Test Description:

Total Metals - Mercury

Analytical Method: QC Batch ID:

SW-846 7470A Qb18062580

Prep Method: Prepared By:

SW-846 7470A

Prep Batch ID

CAS Number

7439-97-6

PB18062557

**Analyst Initial** 

JYou

Parameter

Mercury

% Moisture

0.2

Sample Matrix

Date Collected

Date Received

Date Prepared

16.9

mg/Kg

Soil

CAS

UQL Units DF Date/Time MQL

1

06/25/18 16:37

06/22/2018 08:50

06/22/2018 14:30

06/25/2018 11:00



Client Sample ID: SB-01 (5) A&B Job Sample ID: 18061280.06

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analyst Initial

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

JKD

Sample Matrix Soil

Date Collected 06/22/2018 08:50
Date Received 06/22/2018 14:30
Date Prepared 06/23/2018 10:00

Prep Batch ID PB18062512

% Moisture 16.9

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
71-55-6	1,1,1-Trichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
79-34-5	1,1,2,2-Tetrachloroet	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
79-00-5	1,1,2-Trichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-34-3	1,1-Dichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-35-4	1,1-Dichloroethylene	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
563-58-6	1,1-Dichloropropene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
87-61-6	1,2,3-trichlorobenzen	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
96-18-4	1,2,3-Trichloropropan	< 0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
120-82-1	1,2,4-Trichlorobenzen	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
95-63-6	1,2,4-Trimethylbenze	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
96-12-8	1,2-Dibromo-3-chloro	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
106-93-4	1,2-Dibromoethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
95-50-1	1,2-Dichlorobenzene	<0.00106	Ü	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
107-06-2	1,2-Dichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
78-87-5	1,2-Dichloropropane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
108-67-8	1,3,5-Trimethylbenze	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
541-73-1	1,3-Dichlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
142-28-9	1,3-Dichloropropane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
106-46-7	1,4-Dichlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
594-20-7	2,2-Dichloropropane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
95-49-8	2-Chlorotoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
106-43-4	4-Chlorotoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
99-87-6	4-Isopropyltoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
71-43-2	Benzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
108-86-1	Bromobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
74-97-5	Bromochloromethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-27-4	Bromodichloromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-25-2	Bromoform	<0.00052	U	0.00052	0.0053	0.0005	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
74-83-9	Bromomethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
56-23-5	Carbon tetrachloride	< 0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
108-90-7	Chlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-00-3	Chloroethane	<0.00318	U	0.00318	0.0053	0.003	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
67-66-3	Chloroform		U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
74-87-3	Chloromethane		U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
156-59-2	cis-1,2-Dichloroethyle	<0.00106	U	0.00106		0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
	, , , , , , , , , , , , , , , , , , , ,					3.031	5.000	0.00	mg/ng	0.00	00/27/10 15:54

**REVISED** 

Soil results reported on dry weight basis

Page 24 of 123



Client Sample ID: SB-01 (5) A&B Job Sample ID: 18061280.06

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

06/22/2018 08:50 Date Received 06/22/2018 14:30 Date Prepared 06/23/2018 10:00

Soil

Prep Batch ID Analyst Initial

PB18062512

% Moisture 16.9

Sample Matrix

Date Collected

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
124-48-1	Dibromochloromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
74-95-3	Dibromomethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-71-8	Dichlorodifluorometha	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
100-41-4	Ethylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
98-82-8	Isopropylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
108-38-3&106-4	m- & p-Xylenes	<0.00106	U	0.00106	0.011	0.001	0.01	0.1	mg/Kg	0.88	06/24/18 19:54
78-93-3	MEK	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-09-2	Methylene chloride	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
91-20-3	Naphthalene	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
104-51-8	n-Butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
103-65-1	n-Propylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
95-47-6	o-Xylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
135-98-8	sec-Butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
100-42-5	Styrene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
98-06-6	t-butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
127-18-4	Tetrachloroethylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
108-88-3	Toluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
156-60-5	trans-1,2-Dichloroethy	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
10061-02-6	trans-1,3-Dichloropro	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
79-01-6	Trichloroethylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-69-4	Trichlorofluoromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
75-01-4	Vinyl Chloride	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.88	06/24/18 19:54
1330-20-7	Xylenes	<0.00106	U	0.00106	0.0053	0.001	0.005	0.15	mg/Kg	0.88	06/24/18 19:54
17060-07-0	1,2-Dichloroethane-d4	118					70	130	%	0.88	06/24/18 19:54
1868-53-7	Dibromofluoromethan	108					70	130	%	0.88	06/24/18 19:54
2037-26-5	Toluene-d8(surr)	98.2					70	130	%	0.88	06/24/18 19:54
460-00-4	p-Bromofluorobenzen	98.3					70	130	%	0.88	06/24/18 19:54

7-31-18



Client Sample ID: SB-01 (5) A&B Job Sample ID: 18061280.06 Date: 7/31/2018

Client Name:

Weston Solutions

**Total Cyanide** 

Attn: Ryan Goss

Project Name:

Test Description:

QC Batch ID:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Sample Matrix

Soil

Analytical Method: SW-846 9014 Qb18071645

Date Collected Date Received

06/22/2018 08:50 06/22/2018 14:30

Prep Method: SW-846 9010C Date Prepared

07/16/2018 11:00

Prepared By: Prep Batch ID

LEBell

PB18071629

% Moisture

16.9

Analyst Initial LEB

CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units DF Date/Time 57-12-5 Cyanide VJL < 0.01 H3,U 0.01 0.12 0.01 0.1 2 mg/Kg 1 07/16/18 11:00

7.21-18



Client Sample ID: SB-01 (10) A&B Job Sample ID: 18061280.07 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: % Moisture

SM 2540G

Analytical Method: QC Batch ID:

Qb18062645

Prep Method:

SM 2540G

Prepared By:

SKYanduru

Prep Batch ID

PB18062615

Analyst Initial

YSK

Sample Matrix

Soil

Date Collected

06/22/2018 08:56

Date Received

06/22/2018 14:30

Date Prepared

06/26/2018 07:00

% Moisture 16.2

CAS Number Parameter	Result Flag	SDL SQL MDL MQL	UQL	Units	DF	Date/Time
% Moisture	16.2			%	1	06/26/18 07:02



Client Sample ID: SB-01 (10) A&B Job Sample ID: 18061280.07 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

QC Batch ID:

Total Metals SW-846 6010C Qb18062808

Prep Method: Prepared By: Prep Batch ID SW-846 3050B Mwissman PB18062650

Analyst Initial CAS

Sample Matrix Soil

Date Collected

Date Received

06/22/2018 08:56 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture

16.2

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.46		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7440-38-2	Arsenic	2.70		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7440-39-3	Barium	220		2.39	5.97	0.1	0.25	125	mg/Kg	20	06/28/18 15:41
7440-41-7	Beryllium	0.823		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7440-43-9	Cadmium	<0.05	U	0.05	0.298	0.04	0.25	125	mg/Kg	1	06/27/18 22:16
7440-47-3	Chromium	12.9		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7439-92-1	Lead	6.16		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7440-02-0	Nickel	20.6		2.39	5.97	0.1	0.25	125	mg/Kg	20	06/27/18 22:21
7782-49-2	Selenium	0.30	J	0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 22:16
7440-22-4	Silver	<0.02	U	0.02	0.298	0.02	0.25	125	mg/Kg	1	06/27/18 22:16

73K18



Client Sample ID: SB-01 (10) A&B Job Sample ID: 18061280.07 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: Total Metals - Mercury

Analytical Method: SW-846 7470A QC Batch ID:

Qb18062580 SW-846 7470A

Prep Method: Prepared By:

Analyst Initial

JYou

Prep Batch ID

PB18062557

Sample Matrix Soil

Date Collected 06/22/2018 08:56 Date Received 06/22/2018 14:30

Date Prepared 06/25/2018 11:00

% Moisture

16.2

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	<0.00105	U	0.00105	0.0048	0.00088	0.004	0.2	mg/Kg	1	06/25/18 16:41

7.31-18



Client Sample ID: SB-01 (10) A&B Job Sample ID: 18061280.07 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: **Total Cyanide** SW-846 9014 Qb18071645 SW-846 9010C

Prep Method: Prepared By: Prep Batch ID

QC Batch ID:

LEBell PB18071629

Analyst Initial

LEB

Sample Matrix

Soil Date Collected

Date Received

06/22/2018 08:56 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture

16.2

CAS Number	Paramete	r	Result	Flag	SDL	SQL	MDL -	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	VJL	<0.01	H3,U	0.01	0.119	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

73/18



Client Sample ID: SB-02 (5)
A&B Job Sample ID: 18061280.08

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: % Moisture

Analytical Method: SM 2540G QC Batch ID: Qb18062946 Prep Method: SM 2540G

Prepared By: SKYanduru
Prep Batch ID PB18062939

Analyst Initial YSK

Sample Matrix Soil

Date Collected 06/22/2018 09:40 Date Received 06/22/2018 14:30

Date Prepared 06/28/2018 18:00

% Moisture 18.8

70 1 tolstare 10.0

CAS Number Parameter	Result Flag SDL	SQL MDL MQL	UQL	Units	DF	Date/Time
% Moisture	18.8			%	1	06/28/18 18:10



Client Sample ID: SB-02 (5) A&B Job Sample ID: 18061280.08 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: **Total Metals** SW-846 6010C Qb18062808

Prep Method: Prepared By: Prep Batch ID

QC Batch ID:

SW-846 3050B Mwissman PB18062650

Analyst Initial

Sample Matrix

Soil

Date Collected Date Received

06/22/2018 09:40 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture

18.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	<0.12	U	0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7440-38-2	Arsenic	1.57		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7440-39-3	Barium	139		2.46	6.16	0.1	0.25	125	mg/Kg	20	06/28/18 15:45
7440-41-7	Beryllium	0.806		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7440-43-9	Cadmium	<0.05	U	0.05	0.308	0.04	0.25	125	mg/Kg	1	06/27/18 22:24
7440-47-3	Chromium	7.05		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7439-92-1	Lead	7.03		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7440-02-0	Nickel	4.84		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7782-49-2	Selenium	<0.12	U	0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:24
7440-22-4	Silver	<0.02	U	0.02	0.308	0.02	0.25	125	mg/Kg	1	06/27/18 22:24

7218



Client Sample ID: SB-02 (5)
A&B Job Sample ID: 18061280.08

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: Total Metals - Mercury

Analytical Method: SW-846 7470A QC Batch ID: Qb18062782 Prep Method: SW-846 7470A

Prepared By: JYou

Prep Batch ID PB18062737

Analyst Initial GG

Sample Matrix Soil

Date Collected 06/22/2018 09:40

Date Received 06/22/2018 14:30 Date Prepared 06/26/2018 13:25

% Moisture 18.8

CAS Number MDL UQL Units DF Date/Time Parameter Result Flag SDL SQL MQL 06/26/18 17:17 7439-97-6 Mercury 0.00735 0.00108 0.0049 0.00088 0.004 0.2 mg/Kg 1

7.31.18



Client Sample ID: SB-02 (5) A&B Job Sample ID: 18061280.08

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre Prep Batch ID

Sample Matrix Soil

Date Collected 06/22/2018 09:40 Date Received 06/22/2018 14:30

Date Prepared

06/23/2018 10:00

Analyst Initial

PB18062512

% Moisture

18.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
71-55-6	1,1,1-Trichloroethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
79-34-5	1,1,2,2-Tetrachloroet	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
79-00-5	1,1,2-Trichloroethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-34-3	1,1-Dichloroethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-35-4	1,1-Dichloroethylene	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
563-58-6	1,1-Dichloropropene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
87-61-6	1,2,3-trichlorobenzen	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
96-18-4	1,2,3-Trichloropropan	< 0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
120-82-1	1,2,4-Trichlorobenzen	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
95-63-6	1,2,4-Trimethylbenze	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
96-12-8	1,2-Dibromo-3-chloro	<0.00110	υ	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
106-93-4	1,2-Dibromoethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
95-50-1	1,2-Dichlorobenzene	<0.00110	υ	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
107-06-2	1,2-Dichloroethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
78-87-5	1,2-Dichloropropane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
108-67-8	1,3,5-Trimethylbenze	<0.00110	υ	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
541-73 <b>-</b> 1	1,3-Dichlorobenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
142-28-9	1,3-Dichloropropane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
106-46-7	1,4-Dichlorobenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
594-20-7	2,2-Dichloropropane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
95-49-8	2-Chlorotoluene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
106-43-4	4-Chlorotoluene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
99-87-6	4-Isopropyltoluene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
71-43-2	Benzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
108-86-1	Bromobenzene	< 0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
74-97-5	Bromochloromethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-27-4	Bromodichloromethan	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-25-2	Bromoform	<0.00054	U	0.00054	0.0055	0.0005	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
74-83-9	Bromomethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
56-23-5	Carbon tetrachloride	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
108-90-7	Chlorobenzene	<0.00110		0.00110		0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-00-3	Chloroethane	<0.00329		0.00329	0.0055	0.003	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
67-66-3	Chloroform	<0.00110		0.00110		0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
74-87-3	Chloromethane	<0.00110		0.00110		0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
156-59-2	cis-1,2-Dichloroethyle			0.00110		0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25

**REVISED** 

Soil results reported on dry weight basis

Page 34 of 123



Client Sample ID: SB-02 (5)
A&B Job Sample ID: 18061280.08

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

Prep Batch ID PB18062512

Analyst Initial JKD

Sample Matrix Soil

 Date Collected
 06/22/2018 09:40

 Date Received
 06/22/2018 14:30

 Date Prepared
 06/23/2018 10:00

% Moisture 18

18.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
124-48-1	Dibromochloromethan	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
74-95-3	Dibromomethane	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-71-8	Dichlorodifluorometha	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
100-41-4	Ethylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
98-82-8	Isopropylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
108-38-3&106-4	m- & p-Xylenes	<0.00110	U	0.00110	0.011	0.001	0.01	0.1	mg/Kg	0.89	06/24/18 20:25
78-93-3	MEK	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-09-2	Methylene chloride	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
91-20-3	Naphthalene	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
104-51-8	n-Butylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
103-65-1	n-Propylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
95-47-6	o-Xylene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
135-98-8	sec-Butylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
100-42-5	Styrene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
98-06-6	t-butylbenzene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
127-18-4	Tetrachloroethylene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
108-88-3	Toluene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
156-60-5	trans-1,2-Dichloroethy	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
10061-02-6	trans-1,3-Dichloropro	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
79- <b>01-</b> 6	Trichloroethylene	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-69-4	Trichlorofluoromethan	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
75-01-4	Vinyl Chloride	<0.00110	U	0.00110	0.0055	0.001	0.005	0.05	mg/Kg	0.89	06/24/18 20:25
1330-20-7	Xylenes	<0.00110	U	0.00110	0.0055	0.001	0.005	0.15	mg/Kg	0.89	06/24/18 20:25
17060-07-0	1,2-Dichloroethane-d4	113					70	130	%	0.89	06/24/18 20:25
1868-53-7	Dibromofluoromethan	106					70	130	%	0.89	06/24/18 20:25
2037-26-5	Toluene-d8(surr)	102					70	130	%	0.89	06/24/18 20:25
460-00-4	p-Bromofluorobenzen	103					70	130	%	0.89	06/24/18 20:25

ne7-31-18



Client Sample ID: SB-02 (5)
A&B Job Sample ID: 18061280.08

Date: 7/31/2018

Client Name: Project Name:

Prep Batch ID

Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Total Cyanide
Analytical Method: SW-846 9014
QC Batch ID: Qb18071645
Prep Method: SW-846 9010C
Prepared By: LEBell

LEBell PB18071629

Analyst Initial LEB

Sample Matrix Soil

 Date Collected
 06/22/2018 09:40

 Date Received
 06/22/2018 14:30

 Date Prepared
 07/16/2018 11:00

% Moisture 18.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide VJL	<0.01	H3,U	0.01	0.123	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

MV7,18



Client Sample ID: SB-02 (9) A&B Job Sample ID: 18061280.09

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: % Moisture Analytical Method: SM 2540G

QC Batch ID: Qb18062645 Prep Method: SM 2540G

Prepared By: Prep Batch ID

SKYanduru PB18062615

Analyst Initial YSK Sample Matrix

Date Collected 06/22/2018 09:45 Date Received 06/22/2018 14:30 Date Prepared

06/26/2018 07:00

% Moisture 18.9

SQL MQL UQL Units DF CAS Number Parameter Result Flag SDL MDL Date/Time 06/26/18 07:02 % Moisture 18.9 % 1

**REVISED** 

Soil results reported on dry weight basis



Client Sample ID: SB-02 (9) A&B Job Sample ID: 18061280.09 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: **Total Metals** Analytical Method: SW-846 6010C

QC Batch ID: Qb18062808 Prep Method: SW-846 3050B Prepared By: Mwissman

Prep Batch ID PB18062650

Analyst Initial CAS Sample Matrix Soil

Date Collected 06/22/2018 09:45 Date Received 06/22/2018 14:30

Date Prepared 06/26/2018 13:10

% Moisture 18.9

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.541		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7440-38-2	Arsenic	8.38		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7440-39-3	Barium	153		2,47	6.17	0.1	0.25	125	mg/Kg	20	06/28/18 15:49
7440-41-7	Beryllium	0.842		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7440-43-9	Cadmium	<0.05	U	0.05	0.308	0.04	0.25	125	mg/Kg	1	06/27/18 22:44
7440-47-3	Chromium	11.1		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7439-92-1	Lead	7.77		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7440-02-0	Nickel	10.0		0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7782-49-2	Selenium	0.19	J	0.12	0.308	0.1	0.25	125	mg/Kg	1	06/27/18 22:44
7440-22-4	Silver	<0.02	U	0.02	0.308	0.02	0.25	125	mg/Kg	1	06/27/18 22:44



Client Sample ID: SB-02 (9)
A&B Job Sample ID: 18061280.09

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

**Total Metals - Mercury** 

Analytical Method: QC Batch ID:

SW-846 7470A Qb18062782 SW-846 7470A

Prep Method: Prepared By:

JYou

Prep Batch ID PB18062737

Analyst Initial

GG

Sample Matrix

Soil

Date Collected

06/22/2018 09:45

Date Received

06/22/2018 14:30

Date Prepared (

06/26/2018 13:25

% Moisture

18.9

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	0.00179	J	0.00109	0.0049	0.00088	0.004	0.2	mg/Kg	1	06/26/18 17:20

7-31-18



Client Sample ID: SB-02 (9)
A&B Job Sample ID: 18061280.09

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:
Analytical Method:

T S

Total Cyanide SW-846 9014

QC Batch ID: Prep Method: Qb18071645 SW-846 9010C LEBell

Prepared By: Prep Batch ID

PB18071629

Analyst Initial

LEB

Sample Matrix Soil

Date Collected 06/22/2018 09:45 Date Received 06/22/2018 14:30

Date Received 06/22/2018 14:30 Date Prepared 07/16/2018 11:00

% Moisture

18.9

CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units DF Date/Time 57-12-5 Cyanide UJL < 0.01 H3,U 0.01 0.123 0.01 0.1 2 1 07/16/18 11:00 mg/Kg

NV7318



Client Sample ID: SB-04 (5) A&B Job Sample ID: 18061280.10 Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: % Moisture

Analytical Method: SM 2540G QC Batch ID: Qb18062645

Prep Method: SM 2540G

Prepared By: Prep Batch ID

SKYanduru PB18062615

Analyst Initial

Sample Matrix

Date Collected

06/22/2018 10:00

Date Received Date Prepared 06/22/2018 14:30

06/26/2018 07:00

% Moisture 15.8

DF CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units Date/Time % 06/26/18 07:02 % Moisture 15.8 1



Client Sample ID: SB-04 (5) A&B Job Sample ID: 18061280.10

Date: 7/31/2018

Client Name:

Weston Solutions

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

**Total Metals** 

Analytical Method: QC Batch ID:

Prep Method:

SW-846 6010C Qb18062808 SW-846 3050B

Prepared By: Prep Batch ID Mwissman PB18062650

Analyst Initial

CAS

Sample Matrix

Soil

Date Collected Date Received

06/22/2018 10:00 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture

15.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.20	J	0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7440-38-2	Arsenic	1.70		0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7440-39-3	Barium	236		2.38	5.94	0.1	0.25	125	mg/Kg	20	06/28/18 15:53
7440-41-7	Beryllium	0.676		0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7440-43-9	Cadmium	<0.05	U	0.05	0.297	0.04	0.25	125	mg/Kg	1	06/27/18 22:52
7440-47-3	Chromium	7.99		0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7439-92-1	Lead	15.7		2.38	5.94	0.1	0.25	125	mg/Kg	20	06/27/18 22:57
7440-02-0	Nickel	6.89		0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7782-49-2	Selenium	0.17	J	0.12	0.297	0.1	0.25	125	mg/Kg	1	06/27/18 22:52
7440-22-4	Silver	<0.02	U	0.02	0.297	0.02	0.25	125	mg/Kg	1	06/27/18 22:52





Client Sample ID: SB-04 (5) A&B Job Sample ID: 18061280.10

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Total Metals - Mercury

Analytical Method: QC Batch ID:

Qb18062782 SW-846 7470A

Prep Method: Prepared By:

Prep Batch ID

Analyst Initial

SW-846 7470A

JYou

PB18062737

GG

Sample Matrix

Soil

Date Collected Date Received Date Prepared

06/22/2018 10:00 06/22/2018 14:30

06/26/2018 13:25

% Moisture 15.8

CAS Number	Parameter	Result I	lag SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	0.00576	0.00105	0.0048	0.00088	0.004	0.2	mg/Kg	1	06/26/18 17:23

ME7 18



Client Sample ID: SB-04 (5) A&B Job Sample ID: 18061280.10 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

Prep Batch ID PB18062512

Analyst Initial JKD

Sample Matrix

Soil

Date Collected Date Received Date Prepared 06/22/2018 10:00 06/22/2018 14:30

06/23/2018 10:00

% Moisture

15.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
71-55-6	1,1,1-Trichloroethane	<0.00109	υ	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
79-34-5	1,1,2,2-Tetrachloroet	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
79-00-5	1,1,2-Trichloroethane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-34-3	1,1-Dichloroethane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-35-4	1,1-Dichloroethylene	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
563-58-6	1,1-Dichloropropene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
87-61-6	1,2,3-trichlorobenzen	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
96-18-4	1,2,3-Trichloropropan	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
120-82-1	1,2,4-Trichlorobenzen	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
95-63-6	1,2,4-Trimethylbenze	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
96-12-8	1,2-Dibromo-3-chloro	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
106-93-4	1,2-Dibromoethane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
95-50-1	1,2-Dichlorobenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
107-06-2	1,2-Dichloroethane	< 0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
78-87-5	1,2-Dichloropropane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
108-67-8	1,3,5-Trimethylbenze	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
541-73-1	1,3-Dichlorobenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
142-28-9	1,3-Dichloropropane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
106-46-7	1,4-Dichlorobenzene	< 0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
594-20-7	2,2-Dichloropropane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
95-49-8	2-Chlorotoluene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
106-43-4	4-Chlorotoluene	< 0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
99-87-6	4-Isopropyltoluene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
71-43-2	Benzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
108-86-1	Bromobenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
74-97-5	Bromochloromethane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-27-4	Bromodichloromethan	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-25-2	Bromoform	<0.00054	υ	0.00054	0.0055	0.0005	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
74-83-9	Bromomethane	< 0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
56-23-5	Carbon tetrachloride	< 0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
108-90-7	Chlorobenzene	< 0.00109		0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-00-3	Chloroethane	<0.00328		0.00328	0.0055	0.003	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
67-66-3	Chloroform	<0.00109		0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
74-87-3	Chloromethane		U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
156-59-2	cis-1,2-Dichloroethyle			0.00109		0.001	0.005	0.05	mg/Kg	0.92	

**REVISED** 

Soil results reported on dryweight basis

Page 44 of 123



Client Sample ID: SB-04 (5)

A&B Job Sample ID: 18061280.10

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre Prep Batch ID PB18062512

Analyst Initial JKD

Sample Matrix Soil

Date Collected 06/22/2018 10:00 Date Received 06/22/2018 14:30 Date Prepared 06/23/2018 10:00

% Moisture 15.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
124-48-1	Dibromochloromethan	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
74-95-3	Dibromomethane	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-7 <b>1-</b> 8	Dichlorodifluorometha	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
100-41-4	Ethylbenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
98-82-8	Isopropylbenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
108-38-3&106-4	m- & p-Xylenes	<0.00109	U	0.00109	0.011	0.001	0.01	0.1	mg/Kg	0.92	06/24/18 20:56
78-93-3	MEK	<0.00219	U	0.00219	0.0055	0.002	0.005	0.05	mg/ <b>K</b> g	0.92	06/24/18 20:56
75-09-2	Methylene chloride	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/ <b>K</b> g	0.92	06/24/18 20:56
91-20-3	Naphthalene	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
104-51-8	n-Butylbenzene	<0.00109	Ų	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
103-65-1	n-Propylbenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
95-47-6	o-Xylene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/ <b>K</b> g	0.92	06/24/18 20:56
135-98-8	sec-Butylbenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
100-42-5	Styrene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
98-06-6	t-butylbenzene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
127-18-4	Tetrachloroethylene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
108-88-3	Toluene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
156-60-5	trans-1,2-Dichloroethy	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
10061-02-6	trans-1,3-Dichloropro	<0.00043	U	0.00043	0.0055	0.0004	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
79-01-6	Trichloroethylene	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-69-4	Trichlorofluoromethan	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
75-01-4	Vinyl Chloride	<0.00109	U	0.00109	0.0055	0.001	0.005	0.05	mg/Kg	0.92	06/24/18 20:56
1330-20-7	Xylenes	<0.00109	U	0.00109	0.0055	0.001	0.005	0.15	mg/Kg	0.92	06/24/18 20:56
17060-07-0	1,2-Dichloroethane-d4	119					70	130	%	0.92	06/24/18 20:56
1868-53-7	Dibromofluoromethan	106					70	130	%	0.92	06/24/18 20:56
2037-26-5	Toluene-d8(surr)	97.6					70	130	%	0.92	06/24/18 20:56
460-00-4	p-Bromofluorobenzen	103					70	130	%	0.92	06/24/18 20:56

7.31-18



Client Sample ID: SB-04 (5) A&B Job Sample ID: 18061280.10

Date: 7/31/2018

Client Name:

Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX Project Name:

Attn: Ryan Goss

Test Description:

**Total Cyanide** 

Analytical Method: QC Batch ID:

SW-846 9014 Qb18071645 SW-846 9010C

Prep Method: Prepared By: Prep Batch ID

LEBell PB18071629

Analyst Initial

LEB

Sample Matrix

Soil

Date Collected Date Received 06/22/2018 10:00 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture 15.8

CAS Number	Paramete	er	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	UJL	<0.01	H3,U	0.01	0.119	0.01	0.1	2	mg/Kg	1	07/16/18 11:00



Client Sample ID: SB-04 (10)

A&B Job Sample ID: 18061280.11

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

% Moisture SM 2540G

QC Batch ID: Prep Method: Qb18062646 SM 2540G

Prepared By: Prep Batch ID

SKYanduru PB18062615

Analyst Initial

YSK

Sample Matrix

Soil Date Collected

Date Received

06/22/2018 10:05 06/22/2018 14:30

Date Prepared

06/26/2018 07:00

% Moisture 13.6

CAS Number Parameter	Result Flag	SDL SQL MDL MQL	UQL	Units	DF	Date/Time
% Moisture	13.6			%	1	06/26/18 07:02



Client Sample ID: SB-04 (10) A&B Job Sample ID: 18061280.11

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: **Total Metals** Analytical Method: QC Batch ID:

SW-846 6010C Qb18062808 SW-846 3050B

CAS

Prepared By: Prep Batch ID

Prep Method:

Mwissman PB18062650

Analyst Initial

Sample Matrix

Soil

Date Collected Date Received 06/22/2018 10:05 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture 13.6

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.32		0.12	0.289	0.1	0.25	125	mg/Kg	1	06/27/18 23:00
7440-38-2	Arsenic	5.73		0.12	0.289	0.1	0.25	125	mg/Kg	1	06/27/18 23:00
7440-39-3	Barium	262		2.31	5.79	0.1	0.25	125	mg/Kg	20	06/28/18 15:56
7440-41-7	Beryllium	0.619		0.12	0.289	0.1	0.25	125	mg/Kg	1	06/27/18 23:00
7440-43-9	Cadmium	<0.05	U	0.05	0.289	0.04	0.25	125	mg/Kg	1	06/27/18 23:00
7440-47-3	Chromium	8.26		0.12	0.289	0.1	0.25	125	mg/Kg	1	06/27/18 23:00
7439-92-1	Lead	13.9		2.31	5.79	0.1	0.25	125	mg/Kg	20	06/27/18 23:05
7440-02-0	Nickel	27.2		2.31	5.79	0.1	0.25	125	mg/Kg	20	06/27/18 23:05
7782-49-2	Selenium	0.39		0.12	0.289	0.1	0.25	125	mg/Kg	1	06/27/18 23:00
7440-22-4	Silver	<0.02	U	0.02	0.289	0.02	0.25	125	mg/Kg	1	06/27/18 23:00

7/2/18



Client Sample ID: SB-04 (10) A&B Job Sample ID: 18061280.11

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

Total Metals - Mercury

Analytical Method:

QC Batch ID:

SW-846 7470A Qb18062782 SW-846 7470A

Prep Method: Prepared By:

JYou

Prep Batch ID

PB18062737

**Analyst Initial** 

GG

Sample Matrix

Soil

Date Collected

06/22/2018 10:05

Date Received
Date Prepared

06/22/2018 14:30

06/26/2018 13:25

% Moisture 13.6

CAS Number Units Date/Time Parameter Result Flag SDL SQL MDL MQL UQL 7439-97-6 <0.00102 U 0.00088 0.004 0.2 1 06/26/18 17:27 Mercury 0.00102 0.0046 mg/Kg

10

W) 18



Client Sample ID: SB-04 (10) A&B Job Sample ID: 18061280.11 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: QC Batch ID: **Total Cyanide** SW-846 9014 Qb18071645

SW-846 9010C LEBell

Prepared By: Prep Batch ID

Prep Method:

PB18071629

**Analyst Initial** 

LEB

Sample Matrix

Soil Date Collected

Date Received

06/22/2018 10:05 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture

13.6

CAS Number	Parameter Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide UTL	<0.01	H3,U	0.01	0.116	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

W/18

Client Sample ID: SB-10 (5) A&B Job Sample ID: 18061280.12

Date: 7/31/2018

Client Name:

Weston Solutions

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

% Moisture

Analytical Method: QC Batch ID:

SM 2540G Qb18062646 Prep Method: SM 2540G SKYanduru

Prepared By: Prep Batch ID

PB18062615

Analyst Initial

YSK

Sample Matrix

Soil

Date Collected

06/22/2018 09:55

Date Received

06/22/2018 14:30

Date Prepared

06/26/2018 07:00

% Moisture 16.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
	% Moisture	16.0							%	1	06/26/18 07:02



Client Sample ID: SB-10 (5) A&B Job Sample ID: 18061280.12

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

**Total Metals** 

Analytical Method: QC Batch ID:

Prep Method:

SW-846 6010C Qb18062808 SW-846 3050B

Mwissman

Prepared By: Prep Batch ID

PB18062650

Analyst Initial CAS Sample Matrix

Soil

Date Collected Date Received

06/22/2018 09:55 06/22/2018 14:30

Date Prepared

06/26/2018 13:10

% Moisture

16.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.25	]	0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7440-38-2	Arsenic	1.42		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7440-39-3	Barium	109		2.38	5.95	0.1	0.25	125	mg/Kg	20	06/28/18 16:00
7440-41-7	Beryllium	0.623		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7440-43-9	Cadmium	<0.05	U	0.05	0.298	0.04	0.25	125	mg/Kg	1	06/27/18 23:09
7440-47-3	Chromium	8.83		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7439-92-1	Lead	5.80		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7440-02-0	Nickel	4.79		0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7782-49-2	Selenium	0.17	J	0.12	0.298	0.1	0.25	125	mg/Kg	1	06/27/18 23:09
7440-22-4	Silver	<0.02	U	0.02	0.298	0.02	0.25	125	mg/Kg	1	06/27/18 23:09

7/2//8



Client Sample ID: SB-10 (5) A&B Job Sample ID: 18061280.12

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

**Total Metals - Mercury** 

Analytical Method: QC Batch ID:

SW-846 7470A Qb18062782

Prep Method: Prepared By:

SW-846 7470A JYou

Prep Batch ID

PB18062737

Analyst Initial

GG

Sample Matrix

Soil

Date Collected 06/22/2018 09:55 Date Received

Date Prepared

06/22/2018 14:30

06/26/2018 13:25

% Moisture 16.0

CAS Number	Parameter	Result	Flag SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	0.00532	0.00105	0.0048	0.00088	0.004	0.2	mg/Kg	1	06/26/18 17:30

mr 1/8



Client Sample ID: SB-10 (5) A&B Job Sample ID: 18061280.12

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre Prep Batch ID

Sample Matrix

Soil Date Collected

Date Received Date Prepared

06/22/2018 09:55 06/22/2018 14:30

06/23/2018 10:00

Analyst Initial

JKD

PB18062512

% Moisture 16.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
71-55-6	1,1,1-Trichloroethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
79-34-5	1,1,2,2-Tetrachloroet	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
79-00-5	1,1,2-Trichloroethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-34-3	1,1-Dichloroethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-35-4	1,1-Dichloroethylene	<0.00205	U	0.00205	0.0051	0.002	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
563-58-6	1,1-Dichloropropene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
87-61-6	1,2,3-trichlorobenzen	<0.00205	U	0.00205	0.0051	0.002	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
96-18-4	1,2,3-Trichloropropan	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
120-82-1	1,2,4-Trichlorobenzen	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
95-63-6	1,2,4-Trimethylbenze	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
96-12-8	1,2-Dibromo-3-chloro	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
106-93-4	1,2-Dibromoethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
95-50-1	1,2-Dichlorobenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
107-06-2	1,2-Dichloroethane	<0.00102	υ	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
78-87-5	1,2-Dichloropropane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
108-67-8	1,3,5-Trimethylbenze	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
541-73-1	1,3-Dichlorobenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
142-28-9	1,3-Dichloropropane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
106-46-7	1,4-Dichlorobenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
594-20-7	2,2-Dichloropropane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
95-49-8	2-Chlorotoluene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
106-43-4	4-Chlorotoluene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
99-87-6	4-Isopropyltoluene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
71-43-2	Benzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
108-86-1	Bromobenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
74-97-5	Bromochloromethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-27-4	Bromodichloromethan	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-25-2	Bromoform	<0.00051	U	0.00051	0.0051	0.0005	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
74-83-9	Bromomethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
56-23-5	Carbon tetrachloride	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
108-90-7	Chlorobenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-00-3	Chloroethane	<0.00307	U	0.00307	0.0051	0.003	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
67-66-3	Chloroform	<0.00102		0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
74-87-3	Chloromethane	<0.00102	U	0.00102		0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
156-59-2	cis-1,2-Dichloroethyle	<0.00102	U	0.00102		0.001	0.005	0.05	mg/Kg		06/24/18 21:27
								3.00	פייופייי	5.00	00/21/10 21.2/

**REVISED** 

Soil results reported on dry weight basis

Page 54 of 123



Client Sample ID: SB-10 (5) A&B Job Sample ID: 18061280.12

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre

JKD

Sample Matrix Soil

Date Collected 06/22/2018 09:55 Date Received 06/22/2018 14:30 Date Prepared 06/23/2018 10:00

Prep Batch ID Analyst Initial PB18062512

% Moisture 16.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00041	U	0.00041	0.0051	0.0004	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
124-48-1	Dibromochloromethan	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
74-95-3	Dibromomethane	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-71-8	Dichlorodifluorometha	<0.00205	U	0.00205	0.0051	0.002	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
100-41-4	Ethylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
98-82-8	Isopropylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
108-38-3&106-4	m- & p-Xylenes	<0.00102	U	0.00102	0.01	0.001	0.01	0.1	mg/Kg	0.86	06/24/18 21:27
78-93-3	MEK	<0.00205	U	0.00205	0.0051	0.002	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-09-2	Methylene chloride	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
91-20-3	Naphthalene	<0.00041	U	0.00041	0.0051	0.0004	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
104-51-8	n-Butylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
103-65-1	n-Propylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
95-47-6	o-Xylene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
135-98-8	sec-Butylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
100-42-5	Styrene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
98-06-6	t-butylbenzene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
127-18-4	Tetrachloroethylene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
108-88-3	Toluene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
156-60-5	trans-1,2-Dichloroethy	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
10061-02-6	trans-1,3-Dichloropro	<0.00041	U	0.00041	0.0051	0.0004	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
79-01-6	Trichloroethylene	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-69-4	Trichlorofluoromethan	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
75-01-4	Vinyl Chloride	<0.00102	U	0.00102	0.0051	0.001	0.005	0.05	mg/Kg	0.86	06/24/18 21:27
1330-20-7	Xylenes	<0.00102	U	0.00102	0.0051	0.001	0.005	0.15	mg/Kg	0.86	06/24/18 21:27
17060-07-0	1,2-Dichloroethane-d4	123					70	130	%	0.86	06/24/18 21:27
1868-53-7	Dibromofluoromethan	105					70	130	%	0.86	06/24/18 21:27
2037-26-5	Toluene-d8(surr)	99.9					70	130	%	0.86	06/24/18 21:27
460-00-4	p-Bromofluorobenzen	101					70	130	%	0.86	06/24/18 21:27



Client Sample ID: SB-03 (5) A&B Job Sample ID: 18061280.13 Date: 7/31/2018

Client Name:

Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX Project Name:

Attn: Ryan Goss

Test Description:

% Moisture

Analytical Method: QC Batch ID:

SM 2540G Qb18062646

Prep Method: Prepared By: Prep Batch ID

SM 2540G SKYanduru PB18062615

Analyst Initial

YSK

Sample Matrix

Soil Date Collected

Date Received Date Prepared 06/22/2018 10:35 06/22/2018 14:30

06/26/2018 07:00

% Moisture

17.8

CAS Number Parameter % Moisture Result 17.8

Flag

SDL

SQL

MDL

MQL UQL Units %

DF Date/Time 1 06/26/18 07:02



Client Sample ID: SB-03 (5) A&B Job Sample ID: 18061280.13

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

**Total Metals** SW-846 6010C QC Batch ID: Qb18062808 Prep Method: SW-846 3050B

Prepared By: Prep Batch ID

Mwissman PB18062650

Analyst Initial

CAS

Sample Matrix Soil

Date Collected Date Received

06/22/2018 10:35 06/22/2018 14:30

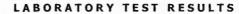
06/26/2018 13:10

% Moisture 17.8

Date Prepared

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.23	J	0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7440-38-2	Arsenic	1.36		0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7440-39-3	Barium	142		2.43	6.08	0.1	0.25	125	mg/Kg	20	06/28/18 16:04
7440-41-7	Beryllium	0.636		0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7440-43-9	Cadmium	<0.05	U	0.05	0.304	0.04	0.25	125	mg/Kg	1	06/27/18 23:17
7440-47-3	Chromium	8.91		0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7439-92-1	Lead	6.69		0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7440-02-0	Nickel	4.46		0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7782-49-2	Selenium	<0.12	U	0.12	0.304	0.1	0.25	125	mg/Kg	1	06/27/18 23:17
7440-22-4	Silver	<0.02	U	0.02	0.304	0.02	0.25	125	mg/Kg	1	06/27/18 23:17

MM 18





Client Sample ID: SB-03 (5) A&B Job Sample ID: 18061280.13 Date: 7/31/2018

Client Name:

Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX Project Name:

Attn: Ryan Goss

Test Description:

Total Metals - Mercury

Analytical Method: SW-846 7470A QC Batch ID: Qb18062782 Prep Method: SW-846 7470A

Prepared By: Prep Batch ID

JYou PB18062737

Analyst Initial GG Sample Matrix Soil

Date Collected Date Received Date Prepared

06/22/2018 10:35 06/22/2018 14:30

06/26/2018 13:25

% Moisture 17.8

CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units DF Date/Time 7439-97-6 0.00483 3 0.00107 0.0049 0.00088 0.004 0.2 1 06/26/18 17:33 Mercury mg/Kg



Client Sample ID: SB-03 (5) A&B Job Sample ID: 18061280.13

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

Analytical Method: QC Batch ID: Prep Method:

SW-846 8260C Qb18062523 SW-846 5035A

Prepared By: Prep Batch ID

Jdongre PB18062512

Analyst Initial JKD Sample Matrix Soil

Date Collected 06/22/2018 10:35 Date Received 06/22/2018 14:30

Date Prepared 06/23/2018 10:00

% Moisture

17.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
71-55-6	1,1,1-Trichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
79-34-5	1,1,2,2-Tetrachloroet	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
79-00-5	1,1,2-Trichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-34-3	1,1-Dichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-35-4	1,1-Dichloroethylene	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
563-58-6	1,1-Dichloropropene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
87-61-6	1,2,3-trichlorobenzen	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
96-18-4	1,2,3-Trichloropropan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
120-82-1	1,2,4-Trichlorobenzen	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
95-63-6	1,2,4-Trimethylbenze	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
96-12-8	1,2-Dibromo-3-chloro	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
106-93-4	1,2-Dibromoethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
95-50-1	1,2-Dichlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
107-06-2	1,2-Dichloroethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
78-87-5	1,2-Dichloropropane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
108-67-8	1,3,5-Trimethylbenze	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
541-73-1	1,3-Dichlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
142-28-9	1,3-Dichloropropane	< 0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
106-46-7	1,4-Dichlorobenzene	< 0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
594-20-7	2,2-Dichloropropane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
95-49-8	2-Chlorotoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
106-43-4	4-Chlorotoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
99-87-6	4-Isopropyltoluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
71-43-2	Benzene	< 0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
108-86-1	Bromobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
74-97-5	Bromochloromethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-27-4	Bromodichloromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-25-2	Bromoform	< 0.00052	U	0.00052	0.0053	0.0005	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
74-83-9	Bromomethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
56-23-5	Carbon tetrachloride	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
108-90-7	Chlorobenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-00-3	Chloroethane	<0.00318	U	0.00318	0.0053	0.003	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
67-66-3	Chloroform	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
74-87-3	Chloromethane	<0.00106	Ü	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
156-59-2	cis-1,2-Dichloroethyle	.0.004.06		0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58

**REVISED** 

Soil results reported on dry weight basis



Client Sample ID: SB-03 (5) A&B Job Sample ID: 18061280.13 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre Sample Matrix Soil
Date Collected 06/2

Date Received

06/22/2018 10:35 06/22/2018 14:30

Prepared By: Prep Batch ID

PB18062512

Date Prepared 06/23/2018 10:00

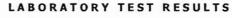
Analyst Initial

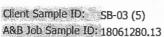
JKD

% Moisture 17.8

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
124-48-1	Dibromochloromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
74-95-3	Dibromomethane	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-71-8	Dichlorodifluorometha	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
100-41-4	Ethylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
98-82-8	Isopropylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
108-38-3&106-4	m- & p-Xylenes	<0.00106	U	0.00106	0.011	0.001	0.01	0.1	mg/Kg	0.87	06/24/18 21:58
78-93-3	MEK	<0.00212	U	0.00212	0.0053	0.002	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-09-2	Methylene chloride	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
91-20-3	Naphthalene	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
104-51-8	n-Butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
103-65-1	n-Propylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
95-47-6	o-Xylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
135-98-8	sec-Butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
100-42-5	Styrene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
98-06-6	t-butylbenzene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
127-18-4	Tetrachloroethylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
108-88-3	Toluene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
156-60-5	trans-1,2-Dichloroethy	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
10061-02-6	trans-1,3-Dichloropro	<0.00042	U	0.00042	0.0053	0.0004	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
79-01-6	Trichloroethylene	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-69-4	Trichlorofluoromethan	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
75-01-4	Vinyl Chloride	<0.00106	U	0.00106	0.0053	0.001	0.005	0.05	mg/Kg	0.87	06/24/18 21:58
1330-20-7	Xylenes	<0.00106	U	0.00106	0.0053	0.001	0.005	0.15	mg/Kg	0.87	06/24/18 21:58
17060-07-0	1,2-Dichloroethane-d4	125					70	130	%	0.87	06/24/18 21:58
1868-53-7	Dibromofluoromethan	109					70	130	%	0.87	06/24/18 21:58
2037-26-5	Toluene-d8(surr)	100					70	130	%	0.87	06/24/18 21:58
460-00-4	p-Bromofluorobenzen	102					70	130	%	0.87	06/24/18 21:58

MK7.3/18





Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description:

**Total Cyanide** 

Analytical Method: QC Batch ID:

SW-846 9014 Qb18071645

Prep Method:

SW-846 9010C

Prepared By:

LEBell

Prep Batch ID

PB18071629

Analyst Initial

LEB

Sample Matrix

Date Collected

06/22/2018 10:35

Date Received

06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture 17.8

CAS Number	Parameter		Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	UJL	<0.01	нз,и	0.01	0.122	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

NB 1-31-18



Client Sample ID: SB-03 (10) A&B Job Sample ID: 18061280.14

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: % Moisture

Analytical Method: QC Batch ID: SM 2540G Qb18062646

Prep Method: Prepared By: Prep Batch ID

SM 2540G SKYanduru PB18062615

Analyst Initial

YSK

Sample Matrix

Date Collected Date Received Date Prepared 06/22/2018 10:45 06/22/2018 14:30

06/26/2018 07:00

Date/Time

06/26/18 07:02

% Moisture 18.1

Soil

CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units DF ----% Moisture 18.1 1



Client Sample ID: SB-03 (10) A&B Job Sample ID: 18061280.14

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

**Total Metals** SW-846 6010C

QC Batch ID: Prep Method: Prepared By:

Qb18062625 SW-846 3050B Mwissman PB18062559

Prep Batch ID Analyst Initial

CAS

Sample Matrix Soil

Date Collected

06/22/2018 10:45

Date Received

06/22/2018 14:30

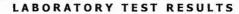
Date Prepared

06/25/2018 12:40

% Moisture 18.1

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.29	J	0.12	0.305	0.1	0.25	125	mg/Kg	1	06/25/18 20:02
7440-38-2	Arsenic	5.96		0.12	0.305	0.1	0.25	125	mg/Kg	1	06/25/18 20:02
7440-39-3	Barium	1050		2.44	6.11	0.1	0.25	125	mg/Kg	20	06/25/18 20:06
7440-41-7	Beryllium	0.563	J	0.12	0.305	0.1	0.25	125	mg/Kg	1	06/25/18 20:02
7440-43-9	Cadmium	0.06	J	0.05	0.305	0.04	0.25	125	mg/Kg	1	06/25/18 20:02
7440-47-3	Chromium	15.7		2.44	6.11	0.1	0.25	125	mg/Kg	20	06/25/18 20:06
7439-92-1	Lead	5.06		0.12	0.305	0.1	0.25	125	mg/Kg	1	06/25/18 20:02
7440-02-0	Nickel	28.1		2.44	6.11	0.1	0.25	125	mg/Kg	20	06/25/18 20:06
7782-49-2	Selenium	0.45	3	0.12	0.305	0.1	0.25	125	mg/Kg	1	06/25/18 20:02
7440-22-4	Silver	0.08	3	0.02	0.305	0.02	0.25	125	mg/Kg	1	06/25/18 20:02

n 1231-18





Client Sample ID: SB-03 (10) A&B Job Sample ID: 18061280.14 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Total Metals - Mercury

Analytical Method: QC Batch ID: SW-846 7470A Qb18062782 SW-846 7470A

Prep Method: Prepared By: Prep Batch ID

JYou PB18062737

Analyst Initial GG

Sample Matrix Soil

Date Collected Date Received Date Prepared 06/22/2018 10:45 06/22/2018 14:30

06/26/2018 13:25

% Moisture

18.1

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	0.00158	J	0.00107	0.0049	0.00088	0.004	0.2	mg/Kg	1	06/26/18 17:36

WY 21/18



Client Sample ID: SB-03 (10) A&B Job Sample ID: 18061280.14

Date: 7/31/2018

Client Name:

Weston Solutions

Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX Attn: Ryan Goss

Test Description:

**Total Cyanide** 

Analytical Method:

SW-846 9014

QC Batch ID:

Qb18071645

Prep Method:

SW-846 9010C

Prepared By:

**LEBell** 

Prep Batch ID

PB18071629

Analyst Initial

LEB

Sample Matrix

Soil

Date Collected

06/22/2018 10:45

Date Received

06/22/2018 14:30

Date Prepared

07/16/2018 11:00

% Moisture 18.1

CAS Number	Paramete	r	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	UTL	<0.01	H3,U	0.01	0.122	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

NC7 18



Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

% Moisture

Analytical Method: QC Batch ID:

SM 2540G Qb18062646

Prep Method: Prepared By:

SM 2540G SKYanduru PB18062615

Prep Batch ID **Analyst Initial** 

YSK

Sample Matrix

Date Collected Date Received Date Prepared Soil 06/22/2018 11:05

06/22/2018 14:30

06/26/2018 07:00

% Moisture 19.0

CAS Number Parameter % Moisture

Result 19.0

Flag

SDL

SQL

MDL

UQL

MQL

Units

DF Date/Time 1 06/26/18 07:02





Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method:

**Total Metals** SW-846 6010C

QC Batch ID: Prep Method:

Qb18062625 SW-846 3050B

Prepared By: Prep Batch ID Mwissman PB18062559

Analyst Initial

CAS

Sample Matrix

Date Collected

Soil

Date Received

06/22/2018 11:05

06/22/2018 14:30 Date Prepared 06/25/2018 12:40

% Moisture 19.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.17	J	0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7440-38-2	Arsenic	1.33		0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7440-39-3	Barium	173		2.47	6.17	0.1	0.25	125	mg/Kg	20	06/25/18 20:15
7440-41-7	Beryllium	0.725		0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7440-43-9	Cadmium	<0.05	U	0.05	0.309	0.04	0.25	125	mg/Kg	1	06/25/18 20:10
7440-47-3	Chromium	10.4		0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7439-92-1	Lead	7.13		0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7440-02-0	Nickel	4.46		0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7782-49-2	Selenium	<0.12	U	0.12	0.309	0.1	0.25	125	mg/Kg	1	06/25/18 20:10
7440-22-4	Silver	<0.02	U	0.02	0.309	0.02	0.25	125	mg/Kg	1	06/25/18 20:10

7/27/8



Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Total Metals - Mercury

QC Batch ID:

Analytical Method: SW-846 7470A Qb18062782 SW-846 7470A

Prep Method: Prepared By: Prep Batch ID

JYou PB18062737

Analyst Initial GG Sample Matrix Soil

Date Collected Date Received

06/22/2018 11:05 06/22/2018 14:30

Date Prepared

06/26/2018 13:25

% Moisture

19.0

MDL MQL UQL Units DF CAS Number Parameter Result Flag SDL SQL Date/Time 0.00720 0.00109 0.0049 0.00088 0.004 0.2 1 06/26/18 17:51 7439-97-6 Mercury mg/Kg



Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: QC Batch ID:

SW-846 8260C

Prep Method:

Qb18062523 SW-846 5035A

Prepared By: Prep Batch ID

Jdongre PB18062512

**Analyst Initial** 

JKD

Sample Matrix

Soil

Date Collected Date Received

06/22/2018 11:05 06/22/2018 14:30

Date Prepared

06/23/2018 10:00

% Moisture 19.0

71-55-6 1,1,1-Trichloroethane	CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
79-34-5 1,1,2,2-Tetrachloroet	630-20-6	1,1,1,2-Tetrachloroet	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
79-00-5 1,1,2-Trichloroethane	71-55-6	1,1,1-Trichloroethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-34-3	79-34-5	1,1,2,2-Tetrachloroet	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-35-4 1,1-Dichloroethylene	79-00-5	1,1,2-Trichloroethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
563-58-6         1,1-Dichloropropene         < 0.00117         U         0.0017         0.0059         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 22:28           87-61-6         1,2,3-trichlorobenzen         < 0.00235	75-34-3	1,1-Dichloroethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1,2,3-trichlorobenzen	75-35-4	1,1-Dichloroethylene	<0.00235	U	0.00235	0.0059	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
96-18-4 1,2,3-Trichloropropan	563-58-6	1,1-Dichloropropene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
120-82-1 1,2,4-Trichlorobenzen	87-61-6	1,2,3-trichlorobenzen	<0.00235	U	0.00235	0.0059	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
95-63-6	96-18-4	1,2,3-Trichloropropan	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
96-12-8 1,2-Dibromo-3-chloro <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 106-93-4 1,2-Dibromoethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 107-06-2 1,2-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 107-06-2 1,2-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-67-8 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-67-8 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-67-8 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1,3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 142-28-9 1.3-Dichloroptopane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 106-46-7 1,4-Dichlorobetzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 106-43-4 4-Chlorotoluene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 106-43-4 4-Chlorotoluene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-86-1 Bromobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-86-1 Bromobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-86-1 Bromobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-86-1 Bromobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-86-1 Bromobenzene <0.0	120-82-1	1,2,4-Trichlorobenzen	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1.2-Dibromoethane	95-63-6	1,2,4-Trimethylbenze	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
95-50-1 1,2-Dichlorobenzene	96-12-8	1,2-Dibromo-3-chloro	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1.7-Dichloroethane	106-93-4	1,2-Dibromoethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
78-87-5         1,2-Dichloropropane         <0.00117         U         0.00117         0.0059         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 22:28           108-67-8         1,3,5-Trimethylbenze         <0.00117	95-50-1	1,2-Dichlorobenzene	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1,3,5-Trimethylbenze	107-06-2	1,2-Dichloroethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
541-73-1         1,3-Dichlorobenzene         <0.00117	78-87-5	1,2-Dichloropropane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1,3-Dichloropropane	108-67-8	1,3,5-Trimethylbenze	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
106-46-7	541-73-1	1,3-Dichlorobenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
594-20-7         2,2-Dichloropropane         <0.00117	142-28-9	1,3-Dichloropropane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
2-Chlorotoluene	106-46-7	1,4-Dichlorobenzene	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
4-Chlorotoluene	594-20-7	2,2-Dichloropropane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
99-87-6 4-Isopropyltoluene	95-49-8	2-Chlorotoluene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
Benzene	106-43-4	4-Chlorotoluene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
Bromobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-97-5 Bromochloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.075-27-4 Bromodichloromethan <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.075-25-2 Bromoform <0.00058 U 0.00058 0.0059 0.005 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-83-9 Bromomethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.056-23-5 Carbon tetrachloride <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.059-075-00-3 Chlorobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.075-00-3 Chloroform <0.00352 U 0.00352 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.074-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg	99-87-6	4-Isopropyltoluene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
74-97-5         Bromochloromethane         <0.00117         U         0.00117         0.0059         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 22:28           75-27-4         Bromodichloromethan         <0.00117	71-43-2	Benzene	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-27-4         Bromodichloromethan         <0.00117         U         0.00117         0.0059         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 22:28           75-25-2         Bromoform         <0.00058	108-86-1	Bromobenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-25-2 Bromoform <0.00058 U 0.00058 0.0059 0.0005 0.005 0.005 mg/Kg 0.95 06/24/18 22:28 74-83-9 Bromomethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 56-23-5 Carbon tetrachloride <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-90-7 Chlorobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 75-00-3 Chloroethane <0.00352 U 0.00352 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 67-66-3 Chloroform <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 74-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	74-97-5	Bromochloromethane	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
74-83-9 Bromomethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 56-23-5 Carbon tetrachloride <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 108-90-7 Chlorobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 75-00-3 Chloroethane <0.00352 U 0.00352 0.0059 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 67-66-3 Chloroform <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 74-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	75-27-4	Bromodichloromethan	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
Carbon tetrachloride <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.008-90-7 Chlorobenzene <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.0059 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.0059 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.0059 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 0.0059 0.001 0.005 0.05 mg/Kg 0.005 0.05 0.05 mg/Kg 0.005 0.05 mg/Kg 0.005 0.05 0.05 mg/Kg 0.005 0.05 0.05 mg/Kg 0.005 0.05 0.05 0.05 0.05 0.05 0.05 0.	75-25-2	Bromoform	<0.00058	U	0.00058	0.0059	0.0005	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
108-90-7         Chlorobenzene         <0.00117         U         0.00117         0.0059         0.001         0.005         0.05         mg/Kg         0.95         06/24/18 22:28           75-00-3         Chloroethane         <0.00352	74-83-9	Bromomethane	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-00-3 Chloroethane <0.00352 U 0.00352 0.0059 0.003 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 67-66-3 Chloroform <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 74-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	56-23-5	Carbon tetrachloride	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
67-66-3 Chloroform <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28 74-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	108-90-7	Chlorobenzene	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
74-87-3 Chloromethane <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	75-00-3	Chloroethane	<0.00352	U	0.00352	0.0059	0.003	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
<b>3</b> , 5	67-66-3	Chloroform	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
156-59-2 cis-1,2-Dichloroethyle <0.00117 U 0.00117 0.0059 0.001 0.005 0.05 mg/Kg 0.95 06/24/18 22:28	74-87-3	Chloromethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
	156-59-2	cis-1,2-Dichloroethyle	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28

**REVISED** 

Soil results reported on dry weight basis

Page 69 of 123



Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Analytical Method: SW-846 8260C QC Batch ID: Qb18062523 Prep Method: SW-846 5035A Prepared By: Jdongre Prep Batch ID PB18062512

Sample Matrix Soil

Date Collected 06/22/2018 11:05 Date Received 06/22/2018 14:30

Date Prepared

06/23/2018 10:00

**Analyst Initial** 

JKD

% Moisture 19.0

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	ÜQL	Units	DF	Date/Time
10061-01-5	cis-1,3-Dichloroprope	<0.00046	U	0.00046	0.0059	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
124-48-1	Dibromochloromethan	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
74-95-3	Dibromomethane	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-71-8	Dichlorodifluorometha	<0.00235	U	0.00235	0.0059	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
100-41-4	Ethylbenzene	< 0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
98-82-8	Isopropylbenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
108-38-3&106-4	m- & p-Xylenes	<0.00117	U	0.00117	0.012	0.001	0.01	0.1	mg/Kg	0.95	06/24/18 22:28
78-93-3	MEK	<0.00235	U	0.00235	0.0059	0.002	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-09-2	Methylene chloride	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
91-20-3	Naphthalene	<0.00046	U	0.00046	0.0059	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
104-51-8	n-Butylbenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
103-65-1	n-Propylbenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
95-47-6	o-Xylene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
135-98-8	sec-Butylbenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
100-42-5	Styrene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
98-06-6	t-butylbenzene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
127-18-4	Tetrachloroethylene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
108-88-3	Toluene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
156-60-5	trans-1,2-Dichloroethy	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
10061-02-6	trans-1,3-Dichloropro	<0.00046	U	0.00046	0.0059	0.0004	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
79-01-6	Trichloroethylene	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-69-4	Trichlorofluoromethan	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
75-01-4	Vinyl Chloride	<0.00117	U	0.00117	0.0059	0.001	0.005	0.05	mg/Kg	0.95	06/24/18 22:28
1330-20-7	Xylenes	<0.00117	U	0.00117	0.0059	0.001	0.005	0.15	mg/Kg	0.95	06/24/18 22:28
17060-07-0	1,2-Dichloroethane-d4	126					70	130	%	0.95	06/24/18 22:28
1868-53-7	Dibromofluoromethan	109					70	130	%	0.95	06/24/18 22:28
2037-26-5	Toluene-d8(surr)	97.8					70	130	%	0.95	06/24/18 22:28
460-00-4	p-Bromofluorobenzen	97.7					70	130	%	0.95	06/24/18 22:28



Client Sample ID: SB-05 (5) A&B Job Sample ID: 18061280.15 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: Analytical Method: **Total Cyanide** SW-846 9014

QC Batch ID: Prep Method: Qb18071646 SW-846 9010C

Prepared By:

LEBell PB18071630

Prep Batch ID

Sample Matrix

Date Collected

Soil

Date Received

06/22/2018 11:05 06/22/2018 14:30

Date Prepared

07/16/2018 11:00

Analyst Initial

LEB

% Moisture 19.0

CAS Number	Paramete	er	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	UTL	<0.01	H3,U	0.01	0.123	0.01	0.1	2	mg/Kg	1	07/16/18 11:00



Client Sample ID: SB-05 (10) A&B Job Sample ID: 18061280.16 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description: % Moisture

Analytical Method:

SM 2540G QC Batch ID: Qb18062646

Prep Method: SM 2540G Prepared By: Prep Batch ID

SKYanduru PB18062615

Analyst Initial

YSK

Sample Matrix

Date Collected Date Received

Date Prepared

Soil 06/22/2018 11:10

06/22/2018 14:30

06/26/2018 07:00

% Moisture 15.4

UQL MDL DF Date/Time CAS Number Parameter Result Flag SDL SQL MQL Units 1 06/26/18 07:02 % Moisture 15.4



Client Sample ID: SB-05 (10) A&B Job Sample ID: 18061280.16

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Ryan Goss

Project Name:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Test Description: Analytical Method: **Total Metals** SW-846 6010C

QC Batch ID: Prep Method:

Qb18062625 SW-846 3050B

Prepared By: Prep Batch ID Mwissman PB18062559

Analyst Initial

CAS

Sample Matrix Soil

Date Collected 06/22/2018 11:10

Date Received 06/22/2018 14:30

Date Prepared 06/25/2018 12:40

% Moisture

15.4

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	0.34	J	0.12	0.296	0.1	0.25	125	mg/Kg	1	06/25/18 20:19
7440-38 <b>-</b> 2	Arsenic	2.32		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/25/18 20:19
7440-39-3	Barium	185		2.36	5.91	0.1	0.25	125	mg/Kg	20	06/25/18 20:23
7440-41-7	Beryllium	0.881		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/25/18 20:19
7440-43 <b>-</b> 9	Cadmium	<0.05	U	0.05	0.296	0.04	0.25	125	mg/Kg	1	06/25/18 20:19
7440-47-3	Chromium	15.6		2.36	5.91	0.1	0.25	125	mg/Kg	20	06/25/18 20:23
7439-92-1	Lead	5.23		0.12	0.296	0.1	0.25	125	mg/Kg	1	06/25/18 20:19
7440-02-0	Nickel	14.0		2.36	5.91	0.1	0.25	125	mg/Kg	20	06/25/18 20:23
7782-49-2	Selenium	<0.12	U	0.12	0.296	0.1	0.25	125	mg/Kg	1	06/25/18 20:19
7440-22-4	Silver	<0.02	U	0.02	0.296	0.02	0.25	125	mg/Kg	1	06/25/18 20:19

MC) 18



Client Sample ID: SB-05 (10) A&B Job Sample ID: 18061280.16

Total Metals - Mercury

Date: 7/31/2018

Attn: Ryan Goss

Client Name:

Weston Solutions

Project Name:

Test Description:

Analytical Method:

01723.062.007.0002 / Mckinney Phase II Houston, TX

Sample Matrix

Soil

Date Collected

Date Received

06/22/2018 11:10 06/22/2018 14:30

Date Prepared

06/26/2018 13:25

Prep Method: Prepared By:

JYou

Prep Batch ID

QC Batch ID:

PB18062737

SW-846 7470A

SW-846 7470A

Qb18062782

Analyst Initial GG

% Moisture

15.4

CAS Number Flag Parameter Result SQL MDL MQL UOL Units SDL DF Date/Time 7439-97-6 Mercury 0.00138 0.00104 0.0047 0.00088 0.004 0.2 mg/Kg 1 06/26/18 17:54

72/18



Client Sample ID: SB-05 (10) A&B Job Sample ID: 18061280.16 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:
Analytical Method:

n: **Total Cyanide** lod: SW-846 9014 Qb18071646

Prep Method: Prepared By: Prep Batch ID

QC Batch ID:

SW-846 9010C LEBell PB18071630

Analyst Initial

LEB

Sample Matrix Soil

Date Collected 06/22/2018 11:10
Date Received 06/22/2018 14:30

Date Prepared 07/16/2018 11:00

% Moisture 15.4

CAS Number	Paramete	er	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	UJL	<0.01	H3,U	0.01	0.118	0.01	0.1	2	mg/Kg	1	07/16/18 11:00

7.34.8



Client Sample ID: FB-1 A&B Job Sample ID: 18061280.17 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Volatile Organic Compounds

Analytical Method: SW-846 8260C QC Batch ID: Qb18062530 Prep Method: SW-846 5030C Prepared By: Jdongre Prep Batch ID PB18062520 Sample Matrix Water

 Date Collected
 06/22/2018 11:52

 Date Received
 06/22/2018 14:30

 Date Prepared
 06/23/2018 10:00

Analyst Initial

1KD

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
79-34-5	1,1,2,2-Tetrachloroet	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
79-00-5	1,1,2-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-35-4	1,1-Dichloroethylene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
87-61-6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
96-12-8	1,2-Dibromo-3-chloro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
106-93-4	1,2-Dibromoethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
95-50-1	1,2-Dichlorobenzene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
78-87-5	1,2-Dichloropropane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
108-67-8	1,3,5-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
142-28-9	1,3-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
106-46-7	1,4-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/24/18 07:20
594-20-7	2,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
95-49-8	2-Chiorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
106-43-4	4-Chlorotoluene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/24/18 07:20
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
74-97-5	Bromochloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-27-4	Bromodichloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-25-2	Bromoform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
74-83-9	Bromomethane	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/24/18 07:20
75-15-0	Carbon disulfide	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/24/18 07:20
56-23-5	Carbon tetrachloride	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/24/18 07:20
108-90-7	Chlorobenzene	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-00-3	Chloroethane	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/24/18 07:20
67-66-3	Chloroform	<0.00100		0.00100		0.001	0.005	0.05	_	1	
0, 00 3	Gilorottii	/0'00T00	J	0.00100	0.003	0.001	0.003	0.05	mg/L	1	06/24/18 07:20

**REVISED** 

Soil results reported on dry weight basis

Page 76 of 123

rted on dry weight basis



Client Sample ID: FB-1

A&B Job Sample ID: 18061280.17

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / Mckinney Phase II Houston, TX

Attn: Ryan Goss

Test Description:

Volatile Organic Compounds

Analytical Method: QC Batch ID: Prep Method: SW-846 8260C Qb18062530 SW-846 5030C

Prepared By: Prep Batch ID

Jdongre PB18062520

Analyst Initial

JKD

Sample Matrix

Water

Date Collected

Date Received

06/22/2018 11:52

Date Received

Date Prepared

06/22/2018 14:30 06/23/2018 10:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
74-95-3	Dibromomethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-71-8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/24/18 07:20
100-41-4	Ethylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/24/18 07:20
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/24/18 07:20
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
103-65-1	n-Propylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
95-47-6	o-Xylene	<0.00100	Ü	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
100-42-5	Styrene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
98-06-6	t-butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
156-60-5	trans-1,2-Dichloroethy	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-69-4	Trichlorofluoromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
75-01-4	Vinyl Chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/24/18 07:20
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/24/18 07:20
17060-07-0	1,2-Dichloroethane-d4	107					70	130	%	1	06/24/18 07:20
1868-53-7	Dibromofluoromethan						70	130	%	1	06/24/18 07:20
2037-26-5	Toluene-d8(surr)	102					70	130	%	1	06/24/18 07:20
460-00-4	p-Bromofluorobenzen	100					70	130	%	1	06/24/18 07:20

MM 1.3 × 18



**Job ID:** 18061280

Date:

7/31/2018

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch: 18061280.01,02,03,06,08,10,12,13,15

Sample Preparation: PB18062512

Prep Method: SW-846 5035A

**Prep Date:** 06/23/18 10:00 **Prep By:** 

Jdongre

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
1,1,1,2-Tetrachloroethane	630-20-6	< MDL	mg/Kg	1	0.005	0.001		Quai
1,1,1-Trichloroethane	71-55-6	< MDL	mg/Kg	1	0.005	0.001		
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/Kg	1	0.005	0.001		
1,1,2-Trichloroethane	79-00-5	< MDL	mg/Kg	1	0.005	0.001		
1,1-Dichloroethane	75-34-3	< MDL	mg/Kg	1	0.005	0.001		
1,1-Dichloroethylene	75-35-4	< MDL	mg/Kg	1	0.005	0.002		1
1,1-Dichloropropene	563-58-6	< MDL	mg/Kg	1	0.005	0.001		
1,2,3-trichlorobenzene	87-61-6	< MDL	mg/Kg	1	0.005	0.002		
1,2,3-Trichloropropane	96-18-4	< MDL	mg/Kg	1	0.005	0.001		
1,2,4-Trichlorobenzene	120-82-1	< MDL	mg/Kg	1	0.005	0.001	- 0	
1,2,4-Trimethylbenzene	95-63-6	< MDL	mg/Kg	1	0.005	0.001		İ
1,2-Dibromo-3-chloropropa	96-12-8	< MDL	mg/Kg	1	0.005	0.001		
1,2-Dibromoethane	106-93-4	< MDL	mg/Kg	1	0.005	0.001		
1,2-Dichlorobenzene	95-50-1	< MDL	mg/Kg	1	0.005	0.001		
1,2-Dichloroethane	107-06-2	< MDL	mg/Kg	1	0.005	0.001		
1,2-Dichloropropane	78-87-5	< MDL	mg/Kg	1	0.005	0.001		
1,3,5-Trimethylbenzene	108-67-8	< MDL	mg/Kg	1	0.005	0.001		
1,3-Dichlorobenzene	541-73-1	< MDL	mg/Kg	1	0.005	0.001		
1,3-Dichloropropane	142-28-9	< MDL	mg/Kg	1	0.005	0.001		
1,4-Dichlorobenzene	106-46-7	< MDL	mg/Kg	1	0.005	0.001		
1,4-Dioxane	123-91-1	< MDL	mg/Kg	1	0.32	0.075		
2,2-Dichloropropane	594-20-7	< MDL	mg/Kg	1	0.005	0.001		
2-Chlorotoluene	95-49-8	< MDL	mg/Kg	1	0.005	0.001		
1-Chlorotoluene	106-43-4	< MDL	mg/Kg	1	0.005	0.001		
1-Isopropyltoluene	99-87-6	< MDL	mg/Kg	1	0.005	0.001		
Benzene	71-43-2	< MDL	mg/Kg	1	0.005	0.001		
Bromobenzene	108-86-1	< MDL	mg/Kg	1	0.005	0.001		
Bromochloromethane	74-97-5	< MDL	mg/Kg	1	0.005	0.001		
Bromodichloromethane	75-27-4	< MDL	mg/Kg	1	0.005	0.001		
Bromoform	75-25-2	< MDL	mg/Kg	1	0.005	0.0005		
Bromomethane	74-83-9	< MDL	mg/Kg	1	0.005	0.001		
Carbon disulfide	75-15-0	< MDL	mg/Kg	1	0.005	0.001		
Carbon tetrachloride	56-23-5	< MDL	mg/Kg	1	0.005	0.002		
Chlorobenzene	108-90-7	< MDL	mg/Kg	1	0.005	0.001		
Chloroethane	75-00-3	< MDL	mg/Kg	1	0.005			
Chloroform	67-66-3	< MDL		1		0.003		
Chloromethane	74-87-3		mg/Kg	1	0.005	0.001		
is-1,2-Dichloroethylene	156-59-2	< MDL	mg/Kg	1	0.005	0.001		
EVISED	130-33-2	\ I'IDL	mg/Kg	1	0.005	0.001		torms



**Job ID:** 18061280

Date:

7/31/2018

Analysis : Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch : 18061280.01,02,03,06,08,10,12,13,15

QC Type: Method Blank								
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qua
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/Kg	1	0.005	0.0004		
Dibromochloromethane	124-48-1	< MDL	mg/Kg	1	0.005	0.001		
Dibromomethane	74-95-3	< MDL	mg/Kg	1	0.005	0.001		
Dichlorodifluoromethane	75-71-8	< MDL	mg/Kg	1	0.005	0.002		
Ethylbenzene	100-41-4	< MDL	mg/Kg	1	0.005	0.001		
Isopropylbenzene	98-82-8	< MDL	mg/Kg	1	0.005	0.001		
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/Kg	1	0.01	0.001		
MEK	78-93 <b>-</b> 3	< MDL	mg/Kg	1	0.005	0.002		
Methylene chloride	75-09-2	< MDL	mg/Kg	1	0.005	0.001		
Naphthalene	91-20-3	< MDL	mg/Kg	1	0.005	0.0004		
n-Butylbenzene	104-51-8	< MDL	mg/Kg	1	0.005	0.001		
n-Propylbenzene	103-65-1	< MDL	mg/Kg	1	0.005	0.001		
o-Xylene	95-47-6	< MDL	mg/Kg	1	0.005	0.001		
sec-Butylbenzene	135-98-8	< MDL	mg/Kg	1	0.005	0.001		
Styrene	100-42-5	< MDL	mg/Kg	1	0.005	0.001		
t-butylbenzene	98-06-6	< MDL	mg/Kg	1	0.005	0.001		
Tetrachloroethylene	127-18-4	< MDL	mg/Kg	1	0.005	0.001		
Toluene	108-88-3	< MDL	mg/Kg	1	0.005	0.001		
trans-1,2-Dichloroethylene	156-60-5	< MDL	mg/Kg	1	0.005	0.001		
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/Kg	1	0.005	0.0004		
Trichloroethylene	79-01-6	< MDL	mg/Kg	1	0.005	0.001		
Trichlorofluoromethane	75-69 <del>-4</del>	< MDL	mg/Kg	1	0.005	0.001		
Vinyl Chloride	75-01 <del>-</del> 4	< MDL	mg/Kg	1	0.005	0.001		
Xylenes	1330-20-7	< MDL	mg/Kg	1	0.005	0.001		
Dibromofluoromethane(surr	1868-53-7	99.6	%	1		1	1	170
1,2-Dichloroethane-d4(surr	17060-07-0	98.7	%	1			<b>(</b>	
Toluene-d8(surr)	2037-26-5	101	%	1				
p-Bromofluorobenzene(surr	460-00-4	101	%	1		_ 1 3		

QC Type: LCS and LCS	D									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.0179	89.4	0.02	0.0171	85.6	4.5	30	78-125	
1,1,1-Trichloroethane	0.02	0.0174	86.8	0.02	0.0171	85.4	1.5	30	70-130	
1,1,2,2-Tetrachloroethane	0.02	0.0182	91	0.02	0.0179	89.4	1.7	30	70-124	
1,1,2-Trichloroethane	0.02	0.0197	98.3	0.02	0.0182	90.9	7.7	30	78-121	
1,1-Dichloroethane	0.02	0.0181	90.7	0.02	0.0178	89.1	1.8	30	76-125	
1,1-Dichloroethylene	0.02	0.0187	93.5	0.02	0.0181	90.5	3.3	30	70-131	
1,1-Dichloropropene	0.02	0.0175	87.5	0.02	0.0177	88.5	1.1	30	76-125	

REVISED



**Job ID:** 18061280

Date:

7/31/2018

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch : 18061280.01,02,03,06,08,10,12,13,15

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qua
1,2,3-trichlorobenzene	0.02	0.0165	82.5	0.02	0.0163	81.6	1.2	30	66-130	
1,2,3-Trichloropropane	0.02	0.0200	99.8	0.02	0.0194	97	2.8	30	73-125	1
1,2,4-Trichlorobenzene	0.02	0.0152	76.1	0.02	0.0156	78.1	2.5	30	66-129	
1,2,4-Trimethylbenzene	0.02	0.0175	87.5	0.02	0.0173	86.6	1.2	30	75-123	
1,2-Dibromo-3-chloropropa	0.02	0.0179	89.6	0.02	0.0190	95.1	5.9	30	61-132	
1,2-Dibromoethane	0.02	0.0194	96.8	0.02	0.0187	93.4	3.4	30	78-122	
1,2-Dichlorobenzene	0.02	0.0175	87.5	0.02	0.0172	86	1.8	30	78-121	
1,2-Dichloroethane	0.02	0.0189	94.4	0.02	0.0185	92.7	2	30	71-128	
1,2-Dichloropropane	0.02	0.0189	94.3	0.02	0.0175	87.5	7.4	30	76-123	
1,3,5-Trimethylbenzene	0.02	0.0174	86.8	0.02	0.0173	86.5	0.3	30	73-124	
1,3-Dichlorobenzene	0.02	0.0168	83.8	0.02	0.0168	84.1	0.3	30	77-121	
1,3-Dichloropropane	0.02	0.0190	94.9	0.02	0.0178	89.3	6.4	30	77-121	
1,4-Dichlorobenzene	0.02	0.0169	84.5	0.02	0.0172	85.9	1.8	30	75-120	
1,4-Dioxane	0.64	0.729	114	0.64	0.739	115	1.3	30	55-138	
2,2-Dichloropropane	0.02	0.0131	65.4	0.02	0.0132	65.9	0.9	30	67-133	L2
2-Chlorotoluene	0.02	0.0176	88.2	0.02	0.0176	88	0.3	30	75-122	
1-Chlorotoluene	0.02	0.0172	86.1	0.02	0.0173	86.7	0.5	30	72-124	
4-Isopropyltoluene	0.02	0.0182	91.2	0.02	0.0186	93.1	1.9	30	73-127	
Benzene	0.02	0.0179	89.5	0.02	0.0177	88.3	1.1	30	77-121	
Bromobenzene	0.02	0.0179	89.6	0.02	0.0177	88.3	1,2	30	78-121	
Bromochloromethane	0.02	0.0187	93.7	0.02	0.0187	93.3	0.2	30	75-125	
Bromodichloromethane	0.02	0.0181	90.7	0.02	0.0174	87	4.1	30	71-127	
Bromoform	0.02	0.0181	90.6	0.02	0.0183	91.4	1	30	67-132	
Bromomethane	0.02	0.0179	89.7	0.02	0.0180	89.8	0.3	30	55-140	
Carbon disulfide	0.02	0.0187	93.6	0.02	0.0190	94.8	1.5	30	63-132	
Carbon tetrachloride	0.02	0.0176	87.9	0.02	0.0173	86.5	1.7	30	69-135	
Chlorobenzene	0.02	0.0175	87.3	0.02	0.0170	85	2.6	30	79-120	
Chloroethane	0.02	0.0195	97.3	0.02	0.0197	98.7	1.2	30	59-139	
Chloroform	0.02	0.0183	91.7	0.02	0.0181	90.5	1.3	30	78-123	
Chloromethane	0.02	0.0242	121	0.02	0.0239	119	1.1	30	50-136	
cis-1,2-Dichloroethylene	0.02	0.0187	93.5	0.02	0.0181	90.5	3.3	30	77-123	
cis-1,3-Dichloropropene	0.02	0.0161	80.5	0.02	0.0162	81.2	0.6	30	74-126	
Dibromochloromethane	0.02	0.0180	90.2	0.02	0.0173	86.7	4.2	30	74-126	
Dibromomethane	0.02	0.0192	95.9	0.02	0.0173	91.6	4.7	30	78-125	
Dichlorodifluoromethane	0.02	0.0170	84.8	0.02	0.0169	84.3	0.3	30	29-149	
Ethylbenzene	0.02	0.0170	88.4	0.02	0.0172	86.1	l .	1		
sopropylbenzene	0.02	0.0177	85.4	0.02	0.0172		2.7	30	76-122	
			1			83.5	2.2	30	68-134	
n- & p-Xylenes	0.04	0.0347	86.8	0.04	0.0340	85.1	2.1	30	77-124	
MEK	0.02	0.0190	95.2	0.02	0.0191	95.7	0.3	30	51-148	
Methylene chloride	0.02	0.0181	90.7	0.02	0.0191	95.6	5.1	30	70-128	
Naphthalene	0.02	0.0181	90.3	0.02	0.0184	91.9	1.8	30	62-129	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis : Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

 $\textbf{Samples in This QC Batch} \ : \quad 18061280.01,02,03,06,08,10,12,13,15$ 

QC Type: LCS and LCS	D				× 11 00	×				
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
n-Butylbenzene	0.02	0.0164	82.1	0.02	0.0162	81.1	1.3	30	70-128	
n-Propylbenzene	0.02	0.0170	85.1	0.02	0.0171	85.5	0.5	30	73-125	
o-Xylene	0.02	0.0176	88	0.02	0.0172	86	2.3	30	77-123	
sec-Butylbenzene	0.02	0.0177	88.4	0.02	0.0178	88.9	0.6	30	73-126	
Styrene	0.02	0.0177	88.7	0.02	0.0169	84.3	4.9	30	76-124	
t-butylbenzene	0.02	0.0172	86.1	0.02	0.0169	84.3	1.9	30	73-125	
Tetrachloroethylene	0.02	0.0188	94.1	0.02	0.0195	97.7	3.6	30	73-128	
Toluene	0.02	0.0180	90.1	0.02	0.0173	86.5	4	30	77-121	
trans-1,2-Dichloroethylene	0.02	0.0175	87.3	0.02	0.0173	86.7	1	30	74-125	
trans-1,3-Dichloropropene	0.02	0.0156	78	0.02	0.0152	75.8	2.6	30	71-130	
Trichloroethylene	0.02	0.0170	84.9	0.02	0.0172	85.9	1.2	30	77-123	
Trichlorofluoromethane	0.02	0.0181	90.4	0.02	0.0180	89.8	0.4	30	62-140	0 .1
Vinyl Chloride	0.02	0.0171	85.6	0.02	0.0173	86.3	1.1	30	56-135	
Xylenes	0.06	0.0523	87.2	0.06	0.0512	85.3	2.1	30	78-124	

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.018	0.0159	88.2						71.4-131	
1,1,1-Trichloroethane	BRL	0.018	0.0147	81.5		4				69.6-140	
1,1,2,2-Tetrachloroethane	BRL	0.018	0.0168	93.5					4.1	66.6-128	
1,1,2-Trichloroethane	BRL	0.018	0.0172	95.6						72.8-125	
1,1-Dichloroethane	BRL	0.018	0.0158	87.7						72.7-129	
1,1-Dichloroethylene	BRL	0.018	0.0158	87.8	1					71.4-131	
1,1-Dichloropropene	BRL	0.018	0.0149	82.8						75.9-132	
1,2,3-trichlorobenzene	BRL	0.018	0.0142	79.1						56.7-153	
1,2,3-Trichloropropane	BRL	0.018	0.0174	96.6						61.6-138	
1,2,4-Trichlorobenzene	BRL	0.018	0.0130	72.2						55.9-150	
1,2,4-Trimethylbenzene	BRL	0.018	0.0146	81.4						71.1-131	
1,2-Dibromo-3-chloropropa	BRL	0.018	0.0159	88.1						52.4-150	
1,2-Dibromoethane	BRL	0.018	0.0170	94.6						72.9-125	
1,2-Dichlorobenzene	BRL	0.018	0.0151	83.8						76.1-126	
1,2-Dichloroethane	BRL	0.018	0.0163	90.8					1	66.4-134	
1,2-Dichloropropane	BRL	0.018	0.0163	90.3						70.2-128	
1,3,5-Trimethylbenzene	BRL	0.018	0.0147	81.9						75.1-127	
1,3-Dichlorobenzene	BRL	0.018	0.0149	82.8						73.9-126	
1,3-Dichloropropane	BRL	0.018	0.0161	89.2						68.3-124	
1,4-Dichlorobenzene	BRL	0.018	0.0144	79.9						72.3-127	
1,4-Dioxane	BRL	0.570	0.684	120					-	70-130	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis : Purgeable Aromatics Method : SW-846 8260C Reporting Units : mg/Kg

 $\textbf{Samples in This QC Batch} \ : \ \ 18061280.01,02,03,06,08,10,12,13,15$ 

QC Sample ID: 180611	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qua
2,2-Dichloropropane	BRL	0.018	0.0110	61.4						68.5-138	M9
2-Chlorotoluene	BRL	0.018	0.0150	83.6						71.7-128	
4-Chlorotoluene	BRL	0.018	0.0148	82.3						72.2-126	
4-Isopropyltoluene	BRL	0.018	0.0153	84.9						77.5-125	
Benzene	BRL	0.018	0.0161	89.2						74-126	
Bromobenzene	BRL	0.018	0.0158	88						73.3-129	
Bromochloromethane	BRL	0.018	0.0165	91.9						68.8-131	
Bromodichloromethane	BRL	0.018	0.0163	90.3						69-135	1
Bromoform	BRL	0.018	0.0164	91.4	1					62-146	
Bromomethane	BRL	0.018	0.0148	82.1						58.7-139	
Carbon disulfide	BRL	0.018	0.0169	93.9					+	70-130	1
Carbon tetrachloride	BRL	0.018	0.0156	86.5						68.7-135	1
Chlorobenzene	BRL	0.018	0.0153	85.1			1			73.3-129	
Chloroethane	BRL	0.018	0.0168	93.2					-	66.2-129	
Chloroform	BRL	0.018	0.0160	88.8	1					73.7-134	1
Chloromethane	BRL	0.018	0.0210	117						51.4-135	•
cis-1,2-Dichloroethylene	BRL	0.018	0.0158	87.8						72.4-132	1
cis-1,3-Dichloropropene	BRL	0.018	0.0138	76.5						67.7-134	
Dibromochloromethane	BRL	0.018	0.0157	87.3						73.2-126	
Dibromomethane	BRL	0.018	0.0171	95.1						69.9-134	
Dichlorodifluoromethane	BRL	0.018	0.0145	80.8						36.8-144	
Ethylbenzene	BRL	0.018	0.0154	85.4				1		72.2-128	
Isopropylbenzene	BRL	0.018	0.0152	84.6						71.2-131	1
m- & p-Xylenes	BRL	0.036	0.0302	83.8						70.7-131	1
MEK	BRL	0.018	0.0170	94.4	1 1					52.5-152	
Methylene chloride	BRL	0.018	0.0170	94.2						70.6-129	
Naphthalene	BRL	0.018	0.0152	84.2	1 1					60.7-145	ļ
n-Butylbenzene	BRL	0.018	0.0138	76.9						66.5-136	1
n-Propylbenzene	BRL	0.018	0.0147	81.7						73.3-126	
o-Xylene	BRL	0.018	0.0155	86.1						71.6-130	1
sec-Butylbenzene	BRL	0.018	0.0133	83				100		77.9-124	
Styrene	BRL	0.018	0.0143	84.1							
t-butylbenzene	BRL	0.018	0.0131	82.3						71.1-131	
				1						74.4-130	
Tetrachloroethylene	BRL	0.018	0.0173	96.1						62.6-157	
Toluene	BRL	0.018	0.0158	87.9						73.3-127	
trans-1,2-Dichloroethylene	BRL	0.018	0.0151	83.7						70-130	
trans-1,3-Dichloropropene	BRL	0.018	0.0134	74.6						71.5-124	
Trichloroethylene	BRL	0.018	0.0151	83.8						69.2-133	
Trichlorofluoromethane	BRL	0.018	0.0152	84.5						63.9-140	
Vinyl Chloride	BRL	0.018	0.0127	70.5	1					40.9-159	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/Kg

**QC Batch ID**: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

 $\textbf{Samples in This QC Batch} \ : \ \ 18061280.01,02,03,06,08,10,12,13,15$ 

QC Type: MS and MSD QC Sample ID: 18061								TY/End			
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Xvlenes	BRI	0.053	0.0457	86.2	J J J	Result	, o rece	IN O	Caremic	69 2-133	Quai

Sample Preparation: PB18062512 Prep Method: SW-846 5035A **Prep Date:** 06/23/18 10:00 **Prep By:** Jdongre

QC Type: Method Blank	ha ha				- 12 6/L 3		
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qua
1,1,1,2-Tetrachloroethane	630-20-6	< MDL	mg/Kg	1	0.005	0.001	
1,1,1-Trichloroethane	71-55-6	< MDL	mg/Kg	1	0.005	0.001	
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/Kg	1	0.005	0.001	
1,1,2-Trichloroethane	79-00-5	< MDL	mg/Kg	1	0.005	0.001	
1,1-Dichloroethane	75-34-3	< MDL	mg/Kg	1	0.005	0.001	
1,1-Dichloroethylene	75-35-4	< MDL	mg/Kg	1	0.005	0.002	
1,1-Dichloropropene	563-58-6	< MDL	mg/Kg	1	0.005	0.001	
1,2,3-trichlorobenzene	87-61-6	< MDL	mg/Kg	1	0.005	0.002	
1,2,3-Trichloropropane	96-18-4	< MDL	mg/Kg	1	0.005	0.001	
1,2,4-Trichlorobenzene	120-82-1	< MDL	mg/Kg	1	0.005	0.001	
1,2,4-Trimethylbenzene	95-63-6	< MDL	mg/Kg	1	0.005	0.001	
1,2-Dibromo-3-chloropropa	96-12-8	< MDL	mg/Kg	1	0.005	0.001	
1,2-Dibromoethane	106-93-4	< MDL	mg/Kg	1	0.005	0.001	
1,2-Dichlorobenzene	95-50-1	< MDL	mg/Kg	1	0.005	0.001	
1,2-Dichloroethane	107-06-2	< MDL	mg/Kg	1	0.005	0.001	
1,2-Dichloropropane	78-87-5	< MDL	mg/Kg	1	0.005	0.001	
1,3,5-Trimethylbenzene	108-67-8	< MDL	mg/Kg	1	0.005	0.001	
1,3-Dichlorobenzene	541-73-1	< MDL	mg/Kg	1	0.005	0.001	
1,3-Dichloropropane	142-28-9	< MDL	mg/Kg	1	0.005	0.001	
1,4-Dichlorobenzene	106-46-7	< MDL	mg/Kg	1	0.005	0.001	
1,4-Dioxane	123-91-1	< MDL	mg/Kg	1	0.32	0.075	
2,2-Dichloropropane	594-20-7	< MDL	mg/Kg	1	0.005	0.001	
2-Chlorotoluene	95-49-8	< MDL	mg/Kg	1	0.005	0.001	
4-Chlorotoluene	106-43-4	< MDL	mg/Kg	1	0.005	0.001	
4-Isopropyltoluene	99-87-6	< MDL	mg/Kg	1	0.005	0.001	
Benzene	71-43-2	< MDL	mg/Kg	1	0.005	0.001	
Bromobenzene	108-86-1	< MDL	mg/Kg	1	0.005	0.001	
Bromochloromethane	74-97-5	< MDL	mg/Kg	1	0.005	0.001	
Bromodichioromethane	75-27-4	< MDL	mg/Kg	1	0.005	0.001	
Bromoform	75-25-2	< MDL	mg/Kg	1	0.005	0.0005	
Bromomethane	74-83-9	< MDL	mg/Kg	1	0.005	0.001	

REVISED



**Job ID**: 18061280

Date:

7/31/2018

Analysis : Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

**Samples in This QC Batch:** 18061280.01,02,03,06,08,10,12,13,15

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qua
Carbon disulfide	75-15-0	< MDL	mg/Kg	1	0.005	0.002		
Carbon tetrachloride	56-23-5	< MDL	mg/Kg	1	0.005	0.001		
Chlorobenzene	108-90-7	< MDL	mg/Kg	1	0.005	0.001		
Chloroethane	75-00-3	< MDL	mg/Kg	1	0.005	0.003		
Chloroform	67-66-3	< MDL	mg/Kg	1	0.005	0.001		
Chloromethane	74-87-3	< MDL	mg/Kg	1	0.005	0.001		
cis-1,2-Dichloroethylene	156-59-2	< MDL	mg/Kg	1	0.005	0.001		
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/Kg	1	0.005	0.0004		
Dibromochloromethane	124-48-1	< MDL	mg/Kg	1	0.005	0.001		
Dibromomethane	74-95-3	< MDL	mg/Kg	1	0.005	0.001		
Dichlorodifluoromethane	75-71-8	< MDL	mg/Kg	1	0.005	0.002		
Ethylbenzene	100-41-4	< MDL	mg/Kg	1	0.005	0.001		
Isopropylbenzene	98-82-8	< MDL	mg/Kg	1	0.005	0.001		
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/Kg	1	0.01	0.001		
MEK	78-93-3	< MDL	mg/Kg	1	0.005	0.002		
Methylene chloride	75-09-2	< MDL	mg/Kg	1	0.005	0.001		
Naphthalene	91-20-3	< MDL	mg/Kg	1	0.005	0.0004		
n-Butylbenzene	104-51-8	< MDL	mg/Kg	1	0.005	0.001	7.4	
n-Propylbenzene	103-65-1	< MDL	mg/Kg	1	0.005	0.001		
o-Xylene	95-47-6	< MDL	mg/Kg	1	0.005	0.001		
sec-Butylbenzene	135-98-8	< MDL	mg/Kg	1	0.005	0.001		
Styrene	100-42-5	< MDL	mg/Kg	1	0.005	0.001		
t-butylbenzene	98-06-6	< MDL	mg/Kg	1	0.005	0.001		
Tetrachloroethylene	127-18-4	< MDL	mg/Kg	. 1	0.005	0.001		
Toluene	108-88-3	< MDL	mg/Kg	1	0.005	0.001		
trans-1,2-Dichloroethylene	156-60-5	< MDL	mg/Kg	1	0.005	0.001	To 100 to	
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/Kg	1	0.005	0.0004		
Trichloroethylene	79-01 <b>-</b> 6	< MDL	mg/Kg	1	0.005	0.001		
Trichlorofluoromethane	75-69-4	< MDL	mg/Kg	1	0.005	0.001		
Vinyl Chloride	75-01-4	< MDL	mg/Kg	1	0.005	0.001		
Xylenes	1330-20-7	< MDL	mg/Kg	1	0.005	0.001		
Dibromofluoromethane(surr	1868-53-7	99.6	%	1				
1,2-Dichloroethane-d4(surr	17060-07-0	98.7	%	1				
Toluene-d8(surr)	2037-26-5	101	%	1				
p-Bromofluorobenzene(surr	460-00-4	101	%	1				

QC Type:	LCS and LC	SD			E. Hieron	103047		13-61			1000
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Oual



**Job ID:** 18061280

Date:

7/31/2018

Analysis : Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By : Jdongre

Samples in This QC Batch : 18061280.01,02,03,06,08,10,12,13,15

	LCS	LCS	LCS	LCSD	LCSD	LCSD	100	RPD	%Recovery	
Parameter	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.0179	89.4	0.02	0.0171	85.6	4.5	30	78-125	
1,1,1-Trichloroethane	0.02	0.0174	86.8	0.02	0.0171	85.4	1.5	30	70-130	
1,1,2,2-Tetrachloroethane	0.02	0.0182	91	0.02	0.0179	89.4	1.7	30	70-124	
1,1,2-Trichloroethane	0.02	0.0197	98.3	0.02	0.0182	90.9	7.7	30	78-121	
1,1-Dichloroethane	0.02	0.0181	90.7	0.02	0.0178	89.1	1.8	30	76-125	
1,1-Dichloroethylene	0.02	0.0187	93.5	0.02	0.0181	90.5	3.3	30	70-131	
1,1-Dichloropropene	0.02	0.0175	87.5	0.02	0.0177	88.5	1.1	30	76-125	
1,2,3-trichlorobenzene	0.02	0.0165	82.5	0.02	0.0163	81.6	1.2	30	66-130	
1,2,3-Trichloropropane	0.02	0.0200	99.8	0.02	0.0194	97	2.8	30	73-125	
1,2,4-Trichlorobenzene	0.02	0.0152	76.1	0.02	0.0156	78.1	2.5	30	66-129	
1,2,4-Trimethylbenzene	0.02	0.0175	87.5	0.02	0.0173	86.6	1,2	30	75-123	
1,2-Dibromo-3-chloropropa	0.02	0.0179	89.6	0.02	0.0190	95.1	5.9	30	61-132	
1,2-Dibromoethane	0.02	0.0194	96.8	0.02	0.0187	93.4	3.4	30	78-122	
1,2-Dichlorobenzene	0.02	0.0175	87.5	0.02	0.0172	86	1.8	30	<b>78-1</b> 21	
1,2-Dichloroethane	0.02	0.0189	94.4	0.02	0.0185	92.7	2	30	71-128	
1,2-Dichloropropane	0.02	0.0189	94.3	0.02	0.0175	87.5	7.4	30	76-123	
1,3,5-Trimethylbenzene	0.02	0.0174	86.8	0.02	0.0173	86.5	0.3	30	73-124	
1,3-Dichlorobenzene	0.02	0.0168	83.8	0.02	0.0168	84.1	0.3	30	77-121	
1,3-Dichloropropane	0.02	0.0190	94.9	0.02	0.0178	89.3	6.4	30	77-121	
1,4-Dichlorobenzene	0.02	0.0169	84.5	0.02	0.0172	85.9	1.8	30	75-120	
1,4-Dioxane	0.64	0.729	114	0.64	0.739	115	1,3	30	55-138	
2,2-Dichloropropane	0.02	0.0131	65.4	0.02	0.0132	65.9	0.9	30	67-133	L2
2-Chlorotoluene	0.02	0.0176	88.2	0.02	0.0176	88	0.3	30	75-122	
4-Chlorotoluene	0.02	0.0172	86.1	0.02	0.0173	86.7	0.5	30	72-124	
4-Isopropyltoluene	0.02	0.0182	91.2	0.02	0.0186	93.1	1.9	30	73-127	
Benzene	0.02	0.0179	89.5	0.02	0.0177	88.3	1.1	30	77-121	
Bromobenzene	0.02	0.0179	89.6	0.02	0.0177	88.3	1,2	30	78-121	
Bromochloromethane	0.02	0.0187	93.7	0.02	0.0187	93.3	0.2	30	<b>75-1</b> 25	
Bromodichloromethane	0.02	0.0181	90.7	0.02	0.0174	87	4.1	30	71-127	
Bromoform	0.02	0.0181	90.6	0.02	0.0183	91.4	1	30	67-132	
Bromomethane	0.02	0.0179	89.7	0.02	0.0180	89.8	0.3	30	55-140	
Carbon disulfide	0.02	0.0187	93.6	0.02	0.0190	94.8	1.5	30	63-132	
Carbon tetrachloride	0.02	0.0176	87.9	0.02	0.0173	86.5	1.7	30	69-135	
Chlorobenzene	0.02	0.0175	87.3	0.02	0.0170	85	2.6	30	79-120	
Chloroethane	0.02	0.0195	97.3	0.02	0.0170	98.7	1.2	30	59-139	
Chloroform	0.02	0.0183	91.7	0.02	0.0181	90.5	1.3	30	78-123	
Chloromethane	0.02	0.0242	121	0.02	0.0239	119	1.1	30	50-136	
cis-1,2-Dichloroethylene	0.02	0.0242	93.5	0.02	0.0233	90.5	3.3	30	77-123	
cis-1,3-Dichloropropene	0.02	0.0161	80.5	0.02	0.0161	81.2	0.6	30	74-126	
Dibromochloromethane	0.02	0.0181	90.2	0.02	0.0162	86.7	4.2	30	74-126	
Dibromomethane	0.02	0.0180	95.9	0.02	0.0173	91.6	4.2	30	78-125	

REVISED



**Job ID**: 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

**Samples in This QC Batch:** 18061280.01,02,03,06,08,10,12,13,15

QC Type: LCS and LCS	D									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Dichlorodifluoromethane	0.02	0.0170	84.8	0.02	0.0169	84.3	0.3	30	29-149	T
Ethylbenzene	0.02	0.0177	88.4	0.02	0.0172	86.1	2.7	30	76-122	
Isopropylbenzene	0.02	0.0171	85.4	0.02	0.0167	83.5	2.2	30	68-134	
m- & p-Xylenes	0.04	0.0347	86.8	0.04	0.0340	85.1	2.1	30	77-124	
MEK	0.02	0.0190	95.2	0.02	0.0191	95.7	0.3	30	51-148	
Methylene chloride	0.02	0.0181	90.7	0.02	0.0191	95.6	5.1	30	70-128	
Naphthalene	0.02	0.0181	90.3	0.02	0.0184	91.9	1.8	30	62-129	
n-Butylbenzene	0.02	0.0164	82.1	0.02	0.0162	81.1	1.3	30	70-128	
n-Propylbenzene	0.02	0.0170	85.1	0.02	0.0171	85.5	0.5	30	73-125	
o-Xylene	0.02	0.0176	88	0.02	0.0172	86	2.3	30	77-123	
sec-Butylbenzene	0.02	0.0177	88.4	0.02	0.0178	88.9	0.6	30	73-126	
Styrene	0.02	0.0177	88.7	0.02	0.0169	84.3	4.9	30	76-124	
t-butylbenzene	0.02	0.0172	86.1	0.02	0.0169	84.3	1.9	30	73-125	
Tetrachloroethylene	0.02	0.0188	94.1	0.02	0.0195	97.7	3.6	30	73-128	
Toluene	0.02	0.0180	90.1	0.02	0.0173	86.5	4	30	77-121	
trans-1,2-Dichloroethylene	0.02	0.0175	87.3	0.02	0.0173	86.7	1	30	74-125	
trans-1,3-Dichloropropene	0.02	0.0156	78	0.02	0.0152	75.8	2.6	30	71-130	
Trichloroethylene	0.02	0.0170	84.9	0.02	0.0172	85.9	1.2	30	77-123	
Trichlorofluoromethane	0.02	0.0181	90,4	0.02	0.0180	89.8	0.4	30	62-140	
Vinyl Chloride	0.02	0.0171	85.6	0.02	0.0173	86.3	1.1	30	56-135	
Xylenes	0.06	0.0523	87.2	0.06	0.0512	85.3	2.1	30	78-124	

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.018	0.0159	88.2						71.4-131	
1,1,1-Trichloroethane	BRL	0.018	0.0147	81.5			0.9			69.6-140	
1,1,2,2-Tetrachloroethane	BRL	0.018	0.0168	93.5						66.6-128	
1,1,2-Trichloroethane	BRL	0.018	0.0172	95.6	-		1			72.8-125	
1,1-Dichloroethane	BRL	0.018	0.0158	87.7						72.7-129	
1,1-Dichloroethylene	BRL	0.018	0.0158	87.8						71.4-131	
1,1-Dichloropropene	BRL	0.018	0.0149	82.8						75.9-132	
1,2,3-trichlorobenzene	BRL	0.018	0.0142	79.1						56.7-153	
1,2,3-Trichloropropane	BRL	0.018	0.0174	96.6						61.6-138	
1,2,4-Trichlorobenzene	BRL	0.018	0.0130	72.2						55.9-150	
1,2,4-Trimethylbenzene	BRL	0.018	0.0146	81.4						71.1-131	
1,2-Dibromo-3-chloropropa	BRL	0.018	0.0159	88.1						52.4-150	
1,2-Dibromoethane	BRL	0.018	0.0170	94.6						72.9-125	
1,2-Dichlorobenzene	BRL	0.018	0.0151	83.8						76.1-126	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By : Jdongre

**Samples in This QC Batch:** 18061280.01,02,03,06,08,10,12,13,15

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qua
1,2-Dichloroethane	BRL	0.018	0.0163	90.8	Jpk Added	Nesuit	70 KEC	KFD	Cultimit	66.4-134	T
1,2-Dichloropropane	BRL	0.018	0.0163	90.8						70.2-128	
1,3,5-Trimethylbenzene	BRL	0.018	0.0103	81.9						75.1-127	
1,3-Dichlorobenzene	BRL	0.018	0.0147	82.8						73.9-126	
1,3-Dichloropropane	BRL	0.018	0.0149	89.2						68.3-124	
1,4-Dichlorobenzene	BRL	0.018	0.0101	79.9	1 1					72,3-127	
1,4-Dioxane	BRL	0.570	0.684	120						70-130	
2,2-Dichloropropane	BRL	0.018	0.0110	61.4						68.5-138	M9
2-Chlorotoluene	BRL	0.018	0.0150	83.6						71.7-128	1119
4-Chlorotoluene	BRL	0.018	0.0130	82.3						72.2-126	
4-Isopropyltoluene	BRL	0.018	0.0153	84.9						77.5-125	
Benzene	BRL	0.018	0.0155	89.2						74-126	
Bromobenzene	BRL	0.018	0.0151	88						73.3-129	
Bromochloromethane	BRL	0.018	0.0156	91.9						68.8-131	
Bromodichloromethane	BRL	0.018	0.0163	90.3						69-135	
Bromoform	BRL	0.018	0.0164	91.4						62-146	
Bromomethane	BRL	0.018	0.0148	82.1						58.7-139	
Carbon disulfide	BRL	0.018	0.0169	93.9						70-130	
Carbon tetrachloride	BRL	0.018	0.0156	86.5						68.7-135	
Chlorobenzene	BRL	0.018	0.0153	85.1						73.3-129	
Chloroethane	BRL	0.018	0.0168	93.2						66.2-129	1
Chloroform	BRL	0.018	0.0160	88.8						73.7-134	
Chloromethane	BRL	0.018	0.0210	117						51.4-135	
cis-1,2-Dichloroethylene	BRL	0.018	0.0158	87.8						72.4-132	
cis-1,3-Dichloropropene	BRL	0.018	0.0138	76.5						67.7-134	
Dibromochloromethane	BRL	0.018	0.0157	87.3						73.2-126	
Dibromomethane	BRL	0.018	0.0171	95.1						69.9-134	
Dichlorodifluoromethane	BRL	0.018	0.0145	80.8						36.8-144	
Ethylbenzene	BRL	0.018	0.0154	85,4						72.2-128	
Isopropylbenzene	BRL	0.018	0.0152	84.6						71.2-131	
m- & p-Xylenes	BRL	0.036	0.0302	83.8						70.7-131	
MEK	BRL	0.018	0.0170	94,4				1		52.5-152	
Methylene chloride	BRL	0.018	0.0170	94.2						70.6-129	
Naphthalene	BRL	0.018	0.0152	84.2						60.7-145	
n-Butylbenzene	BRL	0.018	0.0138	76.9						66.5-136	
n-Propylbenzene	BRL	0.018	0.0147	81.7						73.3-126	
o-Xylene	BRL	0.018	0.0155	86.1						71.6-130	
sec-Butylbenzene	BRL	0.018	0.0149	83						77.9-124	
Styrene	BRL	0.018	0.0151	84.1						71.1-131	
t-butylbenzene	BRL	0.018	0.0148	82.3						74.4-130	

REVISED



**Job ID:** 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/Kg

QC Batch ID: Qb18062523

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch : 18061280.01,02,03,06,08,10,12,13,15

QC Type: MS and MSD QC Sample ID: 180611	26.03										
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Tetrachloroethylene	BRL	0.018	0.0173	96.1						62.6-157	
Toluene	BRL	0.018	0.0158	87.9						73.3-127	
trans-1,2-Dichloroethylene	BRL	0.018	0.0151	83.7	1		1 1			70-130	
trans-1,3-Dichloropropene	BRL	0.018	0.0134	74.6		4				71.5-124	
Trichloroethylene	BRL	0.018	0.0151	83.8	1					69.2-133	
Trichlorofluoromethane	BRL	0.018	0.0152	84.5						63.9-140	
Vinyl Chloride	BRL.	0.018	0.0127	70.5						40.9-159	
Xylenes	BRL	0.053	0.0457	86.2		-				69.2-133	



**Job ID**: 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units: mg/L

**QC Batch ID**: Qb18062530

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch: 18061280.05,17

Sample Preparation: PB18062520

Prep Method: SW-846 5030C

Prep Date: 06/23/18 10:00 Prep By:

Jdongre

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qı
1,1,1,2-Tetrachloroethane	630-20-6	< MDL	mg/L	1	0.005	0.001	
1,1,1-Trichloroethane	<b>71-</b> 55-6	< MDL	mg/L	1	0.005	0.001	
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/L	1	0.005	0.001	
1,1,2-Trichloroethane	79-00-5	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloroethane	75-34-3	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloroethylene	75-35 <del>-4</del>	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloropropene	563-58-6	< MDL	mg/L	1	0.005	0.001	
1,2,3-trichlorobenzene	87-61-6	< MDL	mg/L	1	0.005	0.001	
1,2,3-Trichloropropane	96-18-4	< MDL	mg/L	1	0.005	0.001	
1,2,4-Trichlorobenzene	120-82-1	< MDL	mg/L	1	0.005	0.001	
1,2,4-Trimethylbenzene	95-63-6	< MDL	mg/L	1	0.005	0.001	
1,2-Dibromo-3-chloropropa	96-12-8	< MDL	mg/L	1	0.005	0.001	
1,2-Dibromoethane	106-93-4	< MDL	mg/L	1	0.005	0.001	
1,2-Dichlorobenzene	95-50-1	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloroethane	107-06-2	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloropropane	78-87-5	< MDL	mg/L	1	0.005	0.001	
1,3,5-Trimethylbenzene	108-67-8	< MDL	mg/L	1	0.005	0.001	
1,3-Dichlorobenzene	541-73-1	< MDL	mg/L	, 1	0.005	0.001	
1,3-Dichloropropane	142-28-9	< MDL	mg/L	1	0.005	0.001	
1,4-Dichlorobenzene	106-46-7	< MDL	mg/L	1	0.005	0.001	
1,4-Dioxane	123-91-1	< MDL	mg/L	1	0.32	0.084	
2,2-Dichloropropane	594-20-7	< MDL	mg/L	1	0.005	0.001	
2-Chlorotoluene	95-49-8	< MDL	mg/L	1	0.005	0.001	
4-Chlorotoluene	106-43-4	< MDL	mg/L	1	0.005	0.001	
4-Isopropyltoluene	99-87-6	< MDL	mg/L	1	0.005	0.003	
Benzene	71-43-2	< MDL	mg/L	1	0.005	0.001	
Bromobenzene	108-86-1	< MDL	mg/L	1	0.005	0.001	
Bromochloromethane	74-97-5	< MDL	mg/L	1	0.005	0.001	
Bromodichloromethane	75-27-4	< MDL	mg/L	1	0.005	0.001	
Bromoform	75-25-2	< MDL	mg/L	1	0.005	0.001	
Bromomethane	74-83-9	< MDL	mg/L	1	0.005	0.002	
Carbon disulfide	75-15-0	< MDL	mg/L	1	0.005	0.001	
Carbon tetrachloride	56-23-5	< MDL	mg/L	1	0.005	0.001	
Chlorobenzene	108-90-7	< MDL	mg/L	1	0.005	0.001	
Chloroethane	75-00-3	< MDL	mg/L	1	0.005	0.001	
Chloroform	67-66-3	< MDL	mg/L	1	0.005	0.001	
Chloromethane	74-87-3	< MDL	mg/L	1	0.005	0.001	
cis-1,2-Dichloroethylene	156-59-2	< MDL	mg/L	1	0.005	0.001	



Job ID: 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

**QC Batch ID**: Qb18062530

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch: 18061280.05,17

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qua
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/L	1	0.005	0.001	
Dibromochloromethane	124-48-1	< MDL	mg/L	1	0.005	0.001	
Dibromomethane	74-95-3	< MDL	mg/L	1	0.005	0.001	
Dichlorodifluoromethane	75-71-8	< MDL	mg/L	1	0.005	0.003	
Ethylbenzene	100-41-4	< MDL	mg/L	1	0.005	0.001	
Isopropylbenzene	98-82-8	< MDL	mg/L	1	0.005	0.001	
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/L	1	0.01	0.002	
MEK	78-93-3	< MDL	mg/L	1	0.005	0.001	
Methylene chloride	75-09-2	< MDL	mg/L	1	0.005	0.001	1
Naphthalene	91-20-3	< MDL	mg/L	1	0.005	0.002	
n-Butylbenzene	104-51-8	< MDL	mg/L	1	0.005	0.001	
n-Propylbenzene	103-65-1	< MDL	mg/L	1	0.005	0.001	
o-Xylene	95-47-6	< MDL	mg/L	1	0.005	0.001	
sec-Butylbenzene	135-98-8	< MDL	mg/L	1	0.005	0.001	1
Styrene	100-42-5	< MDL	mg/L	1	0.005	0.001	
t-butylbenzene	98-06-6	< MDL	mg/L	1	0.005	0.001	
Tetrachloroethylene	127-18-4	< MDL	mg/L	1	0.005	0.001	
Toluene	108-88-3	< MDL	mg/L	1	0.005	0.001	
trans-1,2-Dichloroethylene	156-60-5	< MDL	mg/L	1	0.005	0.001	
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/L	1	0.005	0.001	
Trichloroethylene	79-01-6	< MDL	mg/L	1	0.005	0.001	
Trichlorofluoromethane	75-69-4	< MDL	mg/L	1	0.005	0.001	
Vinyl Chloride	75-01-4	< MDL	mg/L	1	0.005	0.001	
Xylenes	1330-20-7	< MDL	mg/L	1	0.015	0.002	
Dibromofluoromethane(surr	1868-53-7	102	%	1			
1,2-Dichloroethane-d4(surr	17060-07-0	95.5	%	1			
Toluene-d8(surr)	2037-26-5	100	%	1			
p-Bromofluorobenzene(surr	460-00-4	98.4	%	1			

QC Type: LCS and LCS	D									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	0.02	0.0198	98.9	0.02	0.0196	97.8	0.9	12	78-120	T
1,1,1-Trichloroethane	0.02	0.0196	97.9	0.02	0.0196	97.9	0.1	13	74-126	
1,1,2,2-Tetrachloroethane	0.02	0.0194	96.8	0.02	0.0199	99.5	2.8	20	71-121	
1,1,2-Trichloroethane	0.02	0.0204	102	0.02	0.0207	104	1.6	14	80-120	
1,1-Dichloroethane	0.02	0.0205	103	0.02	0.0207	103	0.8	12	77-120	
1,1-Dichloroethylene	0.02	0.0212	106	0.02	0.0212	106	0.2	12	71-130	
1,1-Dichloropropene	0.02	0.0204	102	0.02	0.0204	102	0.1	12	79-125	

REVISED



**Job ID**: 18061280

Date:

7/31/2018

Analysis : Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units: mg/L

QC Batch ID: Qb18062530

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch : 18061280.05,17

QC Type: LCS and LCS										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qua
1,2,3-trichlorobenzene	0.02	0.0203	102	0.02	0.0196	98.2	3.7	20	69-121	T Que
1,2,3-Trichloropropane	0.02	0.0200	100	0.02	0.0207	104	3.3	22	73-122	
1,2,4-Trichlorobenzene	0.02	0.0202	101	0.02	0.0191	95.7	5.4	16	69-130	
1,2,4-Trimethylbenzene	0.02	0.0200	100	0.02	0.0198	98.9	1.2	12	76-119	
1,2-Dibromo-3-chloropropa	0.02	0.0189	94.7	0.02	0.0196	98	3.5	27	62-135	
1,2-Dibromoethane	0.02	0.0195	97.3	0.02	0.0204	102	4.7	15	77-121	
1,2-Dichlorobenzene	0.02	0.0197	98.7	0.02	0.0201	101	1.8	11	80-113	
1,2-Dichloroethane	0.02	0.0194	97.1	0.02	0.0203	102	4.4	14	70-125	
,2-Dichloropropane	0.02	0.0200	100	0.02	0.0207	104	3.4	13	78-122	
1,3,5-Trimethylbenzene	0.02	0.0201	100	0.02	0.0199	99.3	0.8	10	75-117	
,3-Dichlorobenzene	0.02	0.0199	99.4	0.02	0.0200	100	0.7	11	80-115	
1,3-Dichloropropane	0.02	0.0197	98.3	0.02	0.0206	103	4.7	16	80-119	
1,4-Dichlorobenzene	0.02	0.0200	99.8	0.02	0.0201	100	0.7	11	79-118	
,4-Dioxane	0.64	0.659	103	0.64	0.664	104	0.8	30	59-139	
2,2-Dichloropropane	0.02	0.0183	91.4	0.02	0.0183	91.7	0.1	15	65-135	
-Chlorotoluene	0.02	0.0200	99.9	0.02	0.0203	101	1.6	17	79-118	
l-Chlorotoluene	0.02	0.0200	100	0.02	0.0202	101	1	15	78-118	
l-Isopropyltoluene	0.02	0.0197	98.7	0.02	0.0211	105	6.7	11	77-116	
Benzene	0.02	0.0203	101	0.02	0.0201	100	0.8	11	79-118	
Bromobenzene	0.02	0.0201	101	0.02	0.0208	104	3.4	12	80-116	
Bromochloromethane	0.02	0.0202	101	0.02	0.0207	104	2.5	15	78-123	
Bromodichloromethane	0.02	0.0194	96.8	0.02	0.0201	101	3.8	12	79-125	
Bromoform	0.02	0.0198	98.8	0.02	0.0196	98.1	0.8	20	71-130	
Bromomethane	0.02	0.0212	106	0.02	0.0211	106	0.3	23	62-141	
Carbon disulfide	0.02	0.0193	96.5	0.02	0.0192	96.2	0.5	30	70-125	
Carbon tetrachloride	0.02	0.0185	92.6	0.02	0.0132	90.7	2.3	13	72-132	
Chlorobenzene	0.02	0.0205	103	0.02	0.0200	100	2.7	11	82-116	
Chloroethane	0.02	0.0201	101	0.02	0.0218	109	8	13	60-138	
Chloroform	0.02	0.0202	101	0.02	0.0218	104	2.8	10	79-124	
Chloromethane	0.02	0.0163	81.6	0.02	0.0200	96.5	16.9	15	61-139	R1
cis-1,2-Dichloroethylene	0.02	0.0212	106	0.02	0.0212	106	0.2	15	78-121	
cis-1,3-Dichloropropene	0.02	0.0212	97.6	0.02	0.0195	97.5	0.1	11	81-122	
Dibromochloromethane	0.02	0.0195	97.3	0.02	0.0198	99	1.7	13	77-120	
Dibromomethane	0.02	0.0200	99.9	0.02	0.0209	104	4.6	16	79-124	
Dichlorodifluoromethane	0.02	0.0200	97.2	0.02	0.0209	103	5.8	15	51-135	
Ethylbenzene	0.02	0.0201	101	0.02	0.0200	100	0.1	12	84-117	
sopropylbenzene	0.02	0.0201	99	0.02	0.0201	98	1	11	80-117	
n- & p-Xylenes	0.02	0.0198	101	0.02	0.0196	98.9	1.6	10	80-117	
11- & ρ-λγιετίες 1ΕΚ	0.04	0.0402	97.7	0.04	0.0396	106	8.6	42	60-136	
Methylene chloride	0.02	0.0195	1	0.02	0.0213		1	1	74-124	
Naphthalene	0.02	0.0205	103 103	0.02	0.0219	109 96 <b>.</b> 2	6.4 7.3	13 27	66-128	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis : Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units: mg/L

QC Batch ID: Qb18062530

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch: 18061280.05,17

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
n-Butylbenzene	0.02	0.0193	96.5	0.02	0.0192	95.8	0.5	20	75-120	T
n-Propylbenzene	0.02	0.0199	99.3	0.02	0.0198	99.1	0.3	12	78-120	
o-Xylene	0.02	0.0199	99.7	0.02	0.0201	101	0.8	11	84-117	
sec-Butylbenzene	0.02	0.0201	100	0.02	0.0199	99.7	1	12	80.2-115	
Styrene	0.02	0.0199	99.4	0.02	0.0197	98.6	0.9	12	86.7-111	
t-butylbenzene	0.02	0.0200	100	0.02	0.0201	101	0.5	14	80.7-116	
Tetrachloroethylene	0.02	0.0199	99.4	0.02	0.0202	101	1.6	27	64.2-140	
Toluene	0.02	0.0203	102	0.02	0.0202	101	0.7	12	85.9-110	
trans-1,2-Dichloroethylene	0.02	0.0203	101	0.02	0.0206	103	1.7	12	73.7-124	
trans-1,3-Dichloropropene	0.02	0.0189	94.7	0.02	0.0192	96.1	1.4	14	83-114	
Trichloroethylene	0.02	0.0199	99.3	0.02	0.0194	96.8	2.3	12	85.4-114	
Trichlorofluoromethane	0.02	0.0201	100	0.02	0.0204	102	1.6	12	74.3-126	
Vinyl Chloride	0.02	0.0165	82.6	0.02	0.0166	82.8	0.5	17	61.8-142	
Xylenes	0.06	0.0601	100	0.06	0.0597	99.5	0.7	9	81.2-117	

QC Sample ID: 180612				84						AND THE SHAPE	
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.0187	93.3						72-139	
1,1,1-Trichloroethane	BRL	0.02	0.0188	94.1						70.6-135	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.0212	106						55-149	
1,1,2-Trichloroethane	BRL	0.02	0.0206	103						68-139	
1,1-Dichloroethane	BRL	0.02	0.0193	96.4						78-134	İ
1,1-Dichloroethylene	BRL	0.02	0.0196	97.9						65-141	
1,1-Dichloropropene	BRL	0.02	0.0189	94.7			1			79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.0176	88						54-144	
1,2,3-Trichloropropane	BRL	0.02	0.0218	109						58-156	
1,2,4-Trichlorobenzene	BRL	0.02	0.0165	82.3	1					69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.0178	89						80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.0218	109						61-145	
1,2-Dibromoethane	BRL	0.02	0.0209	105						68-140	
1,2-Dichlorobenzene	BRL	0.02	0.0185	92.4						70-138	
1,2-Dichloroethane	BRL	0.02	0.0203	102						67-152	
1,2-Dichloropropane	BRL	0.02	0.0187	93.6						79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.0177	88.3						79-133	
1,3-Dichlorobenzene	BRL	0.02	0.0179	89.7						79-128	
1,3-Dichloropropane	BRL	0.02	0.0196	98						70-147	
1,4-Dichlorobenzene	BRL	0.02	0.0179	89.3						76-127	
1,4-Dioxane	BRL	0.64	0.802	125						70-125	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis : Volatile Organic Compounds Method : SW-846 8260C Reporting Units : mg/L

Samples in This QC Batch: 18061280.05,17

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	0.15
2,2-Dichloropropane	BRL	0.02	0,0158	78.8	Spk Added	Result	70 KEC	KPU	CUILIFIII		Qua
2-Chlorotoluene	BRL	0.02	0.0180							60-129	
4-Chlorotoluene	BRL	1		90.2						83-130	
4-Isopropyltoluene	BRL	0.02	0.0181	90.4						82-129	
Benzene	BRL	0.02		92.1	1 1					78-129	
Bromobenzene	BRL	0.02	0.0187 0.0187	93.4 93.3						73-129	
Bromochloromethane	BRL	0.02	0.0187	101	1					76-132	
Bromodichloromethane	BRL	0.02	0.0203	94.9						76-135	
Bromoform	BRL	0.02	0.0190							80-136	
Bromomethane	BRL	0.02		98.9						65-139	
Carbon disulfide	1		0.0194	97					1	65-150	
Carbon tetrachloride	BRL	0.02	0.0219	110	1 1					70-125	
Chlorobenzene	BRL	0.02	0.0181	90.5						70-136	
Chloroethane	BRL	0.02	0.0184	91.8						69-123	
Chloroform	BRL	0.02	0.0210	105						74-145	
Chloromethane	BRL	0.02	0.0201	100						41.8-164	
	BRL	0.02	0.0266	133						42.2-160	
cis-1,2-Dichloroethylene	BRL	0.02	0.0196	97.9						71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.0168	84.1						74-128	
Dibromochloromethane	BRL	0.02	0.0195	97.3						67-141	
Dibromomethane	BRL	0.02	0.0203	101						63.1-135	
Dichlorodifluoromethane	BRL	0.02	0.0202	101						62-146	
Ethylbenzene	BRL	0.02	0.0186	93						80-132	
Isopropylbenzene	BRL	0.02	0.0180	90						78-137	
m- & p-Xylenes	BRL	0.04	0.0366	91.6						74-127	
MEK	BRL	0.02	0.0222	111						52-148	
Methylene chloride	BRL	0.02	0.0196	98.2						68-131	
Naphthalene	BRL	0.02	0.0193	96.6	1					61-116	
n-Butylbenzene	BRL	0.02	0.0171	85.4						73-140	
n-Propylbenzene	BRL	0.02	0.0180	89.8						75-127	
o-Xylene	BRL	0.02	0.0183	91.5						74-126	
sec-Butylbenzene	BRL	0.02	0.0179	89.5	1					75-129	
Styrene	BRL	0.02	0.0183	91.5						77-123	
t-butylbenzene	BRL	0.02	0.0176	88.1						75-126	
Tetrachloroethylene	BRL	0.02	0.0224	112						27.6-194	
Toluene	BRL	0.02	0.0186	92.8						72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.0186	92.8						73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.0170	85.1						66-131	
Trichloroethylene	BRL	0.02	0.0183	91.5						6-138	
Trichlorofluoromethane	BRL	0.02	0.0203	101						67-148	
Vinyl Chloride	BRL	0.02	0.0162	81.1						59.4-140	

REVISED



Job ID: 18061280

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

QC Batch ID: Qb18062530

Created Date: 06/23/18

Created By: Jdongre

Samples in This QC Batch: 18061280.05,17

QC Type: MS and MSD

QC Sample ID:	18061280.17										
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Xylenes	BRL	0.06	0.0549	91.5						73-127	



Job ID: 18061280

Date:

7/31/2018

Analysis: Total Metals - Mercury

Method:

SW-846 7470A

Reporting Units: mg/Kg

QC Batch ID: Qb18062580

Created Date: 06/25/18

Created By: csmith

Samples in This QC Batch: 18061280.03,04,06,07

Digestion:

PB18062557 Prep Method: SW-846 7470A

**Prep Date:** 06/25/18 11:00 **Prep By:** 

JYou

QC Type:	Method	Blank
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Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Mercury	7439-97-6	< MDL	mg/Kg	1	0.004	0.00088	

QC Type: LCS and LCSD

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Oual
Mercury	0.1	0.106	106	0.1	0.110	110	3.6	20	80-120	Quai

QC Type: MS and MSD

QC Sample 1D:	180610	36.01										
Parameter		Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury		BRL	0.1	0.106	104						70-130	



**Job ID**: 18061280

Date:

7/31/2018

Analysis : Total Petroleum Hydrocarbons

Method:

TX 1005

Reporting Units : mg/Kg

QC Batch ID: Qb18062622

Created Date: 06/25/18

Created By: MKulkarni

Samples in This QC Batch: 18061280.01,02

Sample Preparation:

PB18062607

Prep Method: TX 1005

Prep Date: 06/25/18 10:30 Prep By:

MKulkarni

QC Type: Method Blank											
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual			
C6-C12	TPH-1005-1	< MDL	mg/Kg	1	25	23.7					
>C12-C28	TPH-1005-2	< MDL	mg/Kg	1	25	20.3					
>C28-C35	TPH-1005-4	< MDL	mg/Kg	1	25	17.7					
Total C6-C35		< MDL	mg/Kg	1		23.7					
Chlorooctadecane(surr)	3386-33-2	116	%	1							
1-Chlorooctane(surr)	111-85-3	118	%	1							

QC Type: LCS and L	CSD	AROLL SECTION							a second a second a second	
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12	500	561	112	500	552	110	1.6	20	75-125	
>C12-C28	500	555	111	500	542	108	2.4	20	75-125	
>C28-C35	500	511	102	500	498	99.6	2.6	20	75-125	

QC Type: MS a QC Sample ID:	nd MSD 180612	262.01										
Parameter		Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
C6-C12		BRL	500	512	102	500	560	112	9	20	75-125	
>C12-C28		BRL	500	483	96.5	500	547	109	12.5	20	75-125	
>C28-C35		BRL	500	462	92.5	500	526	105	13	20	75-125	



Job ID: 18061280

Date:

7/31/2018

Analysis : Total Recoverable Metals

Method:

SW-846 6010C

Reporting Units: mg/Kg

QC Batch ID: Qb18062625

Created Date: 06/25/18

Created By: csmith

**Samples in This QC Batch** : 18061280.14,15,16

Digestion:

PB18062559

Prep Method: SW-846 3050B

Prep Date: 06/25/18 12:40 Prep By:

Mwissman

QC Type: Method Blank												
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual				
Antimony	7440-36-0	< MDL	mg/Kg	1	0.25	0.1						
Arsenic	7 <del>44</del> 0-38 <b>-</b> 2	< MDL	mg/Kg	1	0.25	0.1						
Barium	7440-39-3	< MDL	mg/Kg	1	0.25	0.1		4				
Beryllium	7440-41-7	< MDL	mg/Kg	1	0.25	0.1						
Cadmium	7440-43-9	< MDL	mg/Kg	1	0.25	0.04						
Chromium	7440-47-3	< MDL	mg/Kg	·1	0.25	0.1						
Lead	7439-92-1	< MDL	mg/Kg	1	0.25	0.1						
Nickel	7440-02-0	< MDL	mg/Kg	1	0.25	0.1						
Selenium	7782-49-2	< MDL	mg/Kg	1	0.25	0.1						
Silver	7440-22-4	< MDL	mg/Kg	1	0.25	0.02						

QC Type: LCS and L	.CSD							187- 20-		
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	25	25.4	101	25	26.0	104	2.5	20	80-114	
Arsenic	25	24.3	97.3	25	24.7	98.6	1.6	20	82-111	
Barium	25	25.0	100	25	25.3	101	1.1	20	83-113	
Beryllium	25	26.4	106	25	26.5	106	0.4	20	83-117	
Cadmium	25	23.7	94.9	25	24.0	96	1.2	20	82-113	
Chromium	25	26.2	105	25	26.6	106	1.4	20	85-113	
Lead	25	24.2	96.6	25	24.4	97.6	1	20	81-112	4
Nickel	25	24.6	98.6	25	24.9	99.8	1	20	83-113	
Selenium	25	23.3	93.4	25	23.8	95.1	2	20	80-111	
Silver	25	23.9	95.6	25	24.1	96.3	0.9	20	82-112	

QC Type: MS and MS QC Sample ID: 1806											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	25	15.6	62.2						80-114	M2
Arsenic	2.03	25	24.3	89.2						82-111	
Barium	7.63	25	28.8	84.7	1 1					83-113	
Beryllium	BRL	25	23.0	91.6						83-117	
Cadmium	BRL	25	21.5	85.8						82-113	
Chromium	1.60	25	23.3	86.9						85-113	
Lead	1.53	25	20.0	74						81-112	
Nickel	2.04	25	21.4	77.6						83-113	

REVISED

Refer to the Definition page for terms.



Job ID: 18061280

Date:

7/31/2018

Analysis: Total Recoverable Metals

Method:

SW-846 6010C

Reporting Units : mg/Kg

**QC Batch ID**: Qb18062625

Created Date: 06/25/18

Created By : csmith

**Samples in This QC Batch:** 18061280.14,15,16

QC Type: MS and MSD QC Sample ID: 18061									Caller H		
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Selenium	BRL	25	21.4	85.2						80-111	
Silver	BRL	25	22.0	88						82-112	



Job ID: 18061280

Date:

7/31/2018

Analysis: % Moisture

Method:

SM 2540G

Reporting Units: %

QC Batch ID: Qb18062645

Created Date: 06/26/18

Created By: SKYanduru

 $\textbf{Samples in This QC Batch} \ : \ \ 18061280.01,02,03,04,06,07,09,10$ 

Sample Preparation: PB18062615

Prep Method: SM 2540G

Prep Date: 06/26/18 07:00 Prep By:

SKYanduru

QC Type: Method Blank						5,000	No. of Control of Control	
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
% Moisture		< MDL	%	1				

QC Type: Dupl	icate						T-17	
QC Sample ID:	18061280.10							
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit			Qual
% Moisture	15.7	15.8	%	0.6	20			



**Job ID**: 18061280

Date:

7/31/2018

Analysis : % Moisture

Method:

SM 2540G

Reporting Units: %

QC Batch ID: Qb18062646

Created Date: 06/26/18

PB18062615

Created By: SKYanduru

Samples in This QC Batch: 18061280.11,12,13,14,15,16

Sample Preparation:

Prep Method: SM 2540G

Prep Date: 06/26/18 07:00 Prep By:

SKYanduru

QC Type:	Method	Blank
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The second secon							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
% Moisture		< MDL	%	1			

QC Type: Duplicate

QC Sample ID: 18061158.01

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
% Moisture	15.9	12.8	%	21.6	20	R1



Job ID: 18061280

Date:

7/31/2018

Analysis : Total Metals - Mercury

Method:

SW-846 7470A

Reporting Units : mg/Kg

QC Batch ID: Qb18062782

Created Date: 06/26/18

Created By: Ggorane

Samples in This QC Batch : 18061280.08,09,10,11,12,13,14,15,16

Digestion:

PB18062737 Prep Method: SW-846 7470A

Prep Date: 06/26/18 13:25 Prep By:

JYou

QC Type: Method Blank							Die Toy.	
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Mercury	7430-07-6	- MDI	ma/Ka	1	0.004	1 0 00008		1

QC Type:	LCS and LCS	D			Olos	lane.				7.50	
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Oual
Mercury		0.1	0.0863	86.3	0.1	0.0862	86.2	0.1	20	80-120	

QC Type: MS and MS QC Sample ID: 1806		NAME -					San a			2-0	
	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
Mercury	0.00397	0.1	0.1130	109						70-130	



Job ID: 18061280

Date:

7/31/2018

Analysis : Total Recoverable Metals

Method:

SW-846 6010C

Reporting Units: mg/Kg

QC Batch ID: Qb18062808

Created Date: 06/27/18

Created By: csmith

Samples in This QC Batch: 18061280.03,04,06,07,08,09,10,11,12,13

PB18062650

Digestion:

Prep Method: SW-846 3050B

**Prep Date:** 06/26/18 13:10 **Prep By:** 

Mwissman

QC Type: Method Bl	ank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
Antimony	7440-36-0	< MDL	mg/Kg	1	0.25	0.1		
Arsenic	7440-38-2	< MDL	mg/Kg	1	0.25	0.1		
Barium	7440-39-3	< MDL	mg/Kg	1	0.25	0.1		
Beryllium	7440-41-7	< MDL	mg/Kg	1	0.25	0.1		
Cadmium	7440-43-9	< MDL	mg/Kg	1	0.25	0.04		
Chromium	7440-47-3	< MDL	mg/Kg	1	0.25	0.1		
Lead	7439-92-1	< MDL	mg/Kg	1	0.25	0.1		
Nickel	7440-02-0	< MDL	mg/Kg	1	0.25	0.1		
Selenium	7782-49-2	< MDL	mg/Kg	1	0.25	0.1	,	
Silver	7440-22-4	< MDL	mg/Kg	1	0.25	0.02		

QC Type: LCS and LC	SD				d stall				2/10/12	
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	25	27.9	111	25	28.8	115	3.3	20	80-114	
Arsenic	25	24.0	96.1	25	24.7	98.9	2.8	20	82-111	+
Barium	25	24.0	96	25	24.3	97.2	1.3	20	83-113	1
Beryllium	25	24.1	96.5	25	24.6	98.3	2	20	83-117	
Cadmium	25	23.5	94.1	25	24.1	96.6	2.4	20	82-113	1
Chromium	25	24.7	98.7	25	25.4	101	2.9	20	85-113	1
Lead	25	24.3	97.1	25	24.9	99.6	2.6	20	81-112	
Nickel	25	23.4	93.6	25	24.1	96.3	2.9	20	83-113	
Selenium	25	23.8	95	25	24.5	98	3.1	20	80-111	
Silver	25	23.6	94.5	25	24.2	97	2.4	20	82-112	1

QC Type: MS a	nd MSD	19								And the second of the second	4 ,	
QC Sample ID:	180612	280.03										
Parameter		Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony		BRL	25	1.1	4.21						80-114	M9
Arsenic		0.92	25	20.4	77.8						82-111	
Barium		66.30	25	71.8	22						83-113	
Beryllium		0.38	25	18.9	74.1						83-117	
Cadmium		BRL	25	18.9	75.7						82-113	
Chromium		7.83	25	31.5	94.9						85-113	
Lead		27.60	25	24.8	-11.2						81-112	МЗ
Nickel		9860.00	25	5000.0	-19440						83-113	M3

REVISED

Refer to the Definition page for terms.



**Job ID:** 18061280

Date:

7/31/2018

Analysis : Total Recoverable Metals

Method:

SW-846 6010C

Reporting Units : mg/Kg

QC Batch ID: Qb18062808

Created Date: 06/27/18

Created By: csmith

**Samples in This QC Batch**: 18061280.03,04,06,07,08,09,10,11,12,13

QC Type: MS and MSD QC Sample ID: 180612	280.03			Allege - restat	Comment of the configuration		The year word				
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Selenium	BRL	25	18.6	74.4						80-111	
Silver	BRL	25	20.8	83.4						82-112	



Job ID: 18061280

Date:

7/31/2018

Analysis : % Moisture

Method:

SM 2540G

Reporting Units: %

QC Batch ID: Qb18062946

Created Date: 06/28/18

Created By: SKYanduru

Samples in This QC Batch: 18061280.08

Sample Preparation: PB18062939

Prep Method: SM 2540G

Prep Date: 06/28/18 18:00 Prep By:

SKYanduru

40.1bo	QC	Type:	Method	Blank
--------	----	-------	--------	-------

Parameter	CAS#	Result	Units	D.F.	MQL	MDL	Qual
% Moisture		< MDL	%	1			

QC Type: Duplicate

QC Sample ID:	18061581.02					
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
% Moisture	26.2	24.9	%	5.1	20	



Job ID: 18061280

Date:

7/31/2018

Analysis: Total Cyanide

Method:

SW-846 9014

Reporting Units : mg/Kg

QC Batch ID: Qb18071645

Created Date: 07/16/18

Created By : LEBell

Samples in This QC Batch : 18061280.03,04,06,07,08,09,10,11,13,14

Sample Preparation: PB18071629

Prep Method: SW-846 9010C

Prep Date: 07/16/18 11:00 Prep By:

LEBell

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Cyanide	57-12-5	< MDL	mg/Kg	1	0.1	0.01	

QC Type: Dupl	icate							
QC Sample ID:	18061280.03						A Company	
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit			Qual
Cyanide	BRL	BRL	mg/Kg	0	20	-		H1

QC Type:	LCS and LCS	D									
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide		0.1	0.0974	97.4	0.1	0.0992	99.2		20	80-120	

QC Type: MS ar QC Sample ID:											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cyanide	BRL	0.1	0.1040	104						80-120	H1



Job ID: 18061280

Date:

7/31/2018

Analysis: Total Cyanide

Method:

SW-846 9014

Reporting Units: mg/Kg

QC Batch ID: Qb18071646

Created Date: 07/16/18

Created By: LEBell

Samples in This QC Batch: 18061280.15,16

Sample Preparation: PB18071630

Prep Method: SW-846 9010C

**Prep Date:** 07/16/18 11:00 **Prep By:** 

LEBell

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Cyanide	57-12-5	< MDL	mg/Kg	1	0.1	0.01	

QC Type: Duplicate

QC Sample ID: 18061280.15

Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	- 100 mm -	Qual
Cyanide	BRL	BRL	mg/Kg	0	20		H1

OC.	Type:	ICS:	I bas	CSD
140	. JPC.		MII CO P	.000

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide	0.1	0.0974	97.4	0.1	0.0992	99.2	1.8	20	80-120	

QC Type: MS and MSD

QC Sample 10:	18061280.15										1
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cvanide	BRI	0.1	0.0935	93.5					T	80-120	H1

A & B Labs Chair	Chain of Custody		The Chain of Custody is a Legal Document	Page [ of 2
(0)	1. Westo	REPORT TO: 2.	INVOICE TO:	3. PO # 3a. A&B Quote #
9 II Free	Address: 5599	Sar Felloe		4. Turnaround Time (Business Days)
	Contact: ZYON	(1055) Contact:	Day Berhan	
	Phone:	39 85 6 668 Phone:	7139856610	3 Days* *Surcharge applies
DOOL	E-mail: & ryen gcss.	ryen gcss @water abutions.com E-mail: 0	daws Henhan@ Westersow fines of	AD 7 Days - Standard nssetute 1.000 - Standard
6. Project Name/Location McKinney Phase I	Harston	X	13. 14. Containers* 15. Preservatives**	
1 = 1	Condition   Condition	Tod C		10
8. Sampler's Name & Company (PLEASE PRINT)	Sampler's Signature &	atte	Contain	2007 TOT
Di eldi	10. Sampling	J. 12. Matrix	-	\$100 C
	Date 24hr OF	Grab Water Soil Soil Sludge Oil Oil Water Air Nater	10 12 10 /S out	OOD 18. REMARKS
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MJ-05(1)	0111	メ	XXX	MS/MSD
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52-1 (6)	(1921) Areco	> >	XX	Cars prep
	7580	X	X	
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19. RELINOUISHED BY	672/16/1749	20. RECEIVED BY	C/24/8 12:49	21-KNOWN HAZARDS/COMMENTS
dank the	05.41 8 14.20	MM	V W.22.18 1430	Jemperature 3,4,-,15736
	2	1		Thermometer ID (707629
*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter 4 oz/8 oz - glass wide mouth P/O - Plastic/other	Glass 1 Liter other	**Preservatives: C · Cool H · HCl OH · NAOH T · NA,S,O,	N - HNO <sub>3</sub> S - H <sub>2</sub> SO <sub>4</sub>	Intact: Y or N Initials M
		N		A&B cannot accept verbal changes Please FAX written changes to 713-453-6091
AR IISE ONLY SAMPLING	RENTALP/!	"USupplies	Field Work	Samples will be disposed of after 30 days A&B reserves the right to return samples

A & B Labs Chai	Chain of Custody	The Chain of (	The Chain of Custody is a Legal Document	Page 2 of 2
st Fwy (I-1		REPORT TO: 2.	INVOICE TO:	3. PO#
Suite 100 Houston TX 72030	Company: Westor	Company	pany:	3a. A&B Quote #
713-453-6060	Address: 5599 5	san telype Address:	ess:	4. Turnaround Time (Business Days)
713-453-6091 Fax	Have	Stor, TX		□ 1 Day* □ Other:
	3	Contact:	act	□ 2 Days*
A&B JOB ID # (8) (0   78)	Phone: 712,58	S (GE C) Phone:	.9	*Surcharge applies
5. Project #	-			Standard
	E-mail: V Choch Cho	dennam @ wastof-m	OF-FRICAS CON	Cays Cranada
6. Project Name/Location			13. 14. Containers*	
Metimes DVI	233CO		15. Preservatives**	
7. Reporting Requirement:	7		16. PH-Lab Only	
TRRP Limits only TRRP Rpt. Package 🗆 See	☐ See Attached ☐ Standard Level II	LIPST LIMBL LIEDD	ers	
Z			nietn	
LAB USE 9. Sample ID and Description ONLY	10. Sampling 11.	12. Matrix	_	
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Pag	Date 24hr ©	Gra Soi Sludg Oil Wate	otho otho	18 BEMARKS
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40 CTIONION TO 04				
19. RELIMPOUSHED BY	CANTE TIME 20	20. RECEIVED BY	CASSIES I	TIME 27-KNOWN HAZARDS/COMMENTS
		1	0 0 0000	0000
3	01/2/18 14:10	7	DI 91-77-70	50 Temperature: 3,4-1-5,3
containers: VOA - 40 ml vial		**Preservatives: C - Cool H - HCI	HCI N - HNO <sub>3</sub> S - H <sub>2</sub> SO <sub>4</sub>	Thermometer ID 17076 M
* OZ/O OZ - glass wide mouth P/O - Plastic/other		OH - NaOH T - N	T - NA <sub>2</sub> S <sub>2</sub> O <sub>3</sub> X - Other	tonne
METHOD OF SHIPMENT	IB	BILL OF LADING/TRACKING #		Please FAX written changes to 713-453-6091
I AR IISF ONLY SAMPLING	RENTALP/U	Supplies	Field Work	Samples will be disposed of after 30 days A&B reserves the right to return samples



## **Sample Condition Checklist**

Name: Weston Solutions					1				
perature : 3.4-0.1CF=3.3°C	Sample pH	: N/A							
mometer ID : <b>1707629</b>	pH Paper ID	: N/A							
	Che	ck Point	S		-		Yes	No	N/A
Cooler seal present and signed.							. X		
Sample(s) in a cooler.					*****		X		
If yes, ice in cooler.							Х		
Sample(s) received with chain-of-	custody.						Х		
C-O-C signed and dated.							Х		
Sample(s) received with signed sa	mple custody se	eal.						X	
Sample containers arrived intact. (	If no comment)						Х		
	uid Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Oth	er
								L	
Sample(s) were received in approp	riate container	(s).					X		
Sample(s) were received with prop	er preservative						Х		
All samples were logged or labeled		116					X		
Sample ID labels match C-O-C ID's							X		
Bottle count on C-O-C matches bot	tles found.							Χ	
Sample volume is sufficient for ana	lyses requested	ı.					X		
Samples were received within the	hold time.						Х		
VOA vials completely filled.							Х		
Sample accepted.							×		
Has client been contacted about	sub-out								X
ments : Include actions taken to res	olve discrepand	ies/probl	em:						
: 05 & 17. Received pre-weighed vials fo	r 01-03, 06, 08, 1	2, 13 & 15	ANH 6-22-1	8.					
	Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-comple(s) received with signed sample(s) received with signed sample containers arrived intact. (Matrix Water Soil Liquid Sample(s) were received in appropriately Sample(s) were received with propriately Sample(s) were received with propriately Sample ID labels match C-O-C ID's Bottle count on C-O-C matches bottle sample were received within the WOA vials completely filled.  Sample accepted.  Has client been contacted about saments: Include actions taken to resemble.	Chec Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample containers arrived intact. (If no comment)  Matrix Water Soil Liquid Sludge:  Sample(s) were received in appropriate container(s)  Sample(s) were received with proper preservative All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Sample volume is sufficient for analyses requested.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out ments: Include actions taken to resolve discrepance.	Check Point  Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Solid:  Sample(s) were received in appropriate container(s).  Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Sample volume is sufficient for analyses requested.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out	Check Points  Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Solid Cassette    Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out  ments: Include actions taken to resolve discrepancies/problem:	Check Points  Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample(s) received with signed sample custody seal.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Solid Cassette Tube  Sample(s) were received in appropriate container(s).  Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Sample volume is sufficient for analyses requested.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out	Check Points  Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample(s) received with signed sample custody seal.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Solid Cassette Tube Bulk:  Sample(s) were received in appropriate container(s).  Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Sample volume is sufficient for analyses requested.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out	Cooler seal present and signed.  Sample(s) in a cooler.  If yes, ice in cooler.  Sample(s) received with chain-of-custody.  C-O-C signed and dated.  Sample(s) received with signed sample custody seal.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Solid Cassette Tube Bulk Badge Tube Sample(s) were received in appropriate container(s).  Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Bottle count on C-O-C matches bottles found.  Samples were received within the hold time.  VOA vials completely filled.  Sample accepted.  Has client been contacted about sub-out ments: Include actions taken to resolve discrepancies/problem:	Check Points	Check Points  Check Points  Check Points  Check Points  Check Points  Check Points  Cooler seal present and signed.  Sample(s) in a cooler.  Sample(s) in a cooler.  Sample(s) received with chain-of-custody.  Co-O-C signed and dated.  Sample(s) received with signed sample custody seal.  Sample containers arrived intact. (If no comment).  Matrix Water Soil Liquid Sludge Soild Cassette Tube Bulk Badge Food Oth:  Sample(s) were received in appropriate container(s).  Sample(s) were received with proper preservative  All samples were logged or labeled.  Sample ID labels match C-O-C ID's  Sample sufficient for analyses requested.  Sample volume is sufficient for analyses requested.  Sample sufficient for analyses requested.  Sample accepted.  Has client been contacted about sub-out  The containers private of the contacted about sub-out  The containers private of the contacted about sub-out  The containers private of the contacted about sub-out  The containers private of the contacted about sub-out  The containers private of the contacted about sub-out  The containers private of the contacted about sub-out  T

Received by: AHall Check in by/date: AHall / 06/22/2018

Phone: 713-453-6060 www.ablabs.com

# DCS Summary

A&B JobID 18061280
Weston Solutions
01723.062.007.0002 / Mckinney Phase II
Houston, TX
Sample Collected 6/21/2018

	%Rec
	Spike Units %Rec
	Spike Amount
	D.F.
O	Units
	Result

EnteredBy LEBell

EnteredDate 07/26/2018

84

0.005

mg/Kg 1

0.0042

Parameter Cyanide

OCType Method DCS SW-846 9014

410	
11	1
A.	1
41	۰
67	H

Parameter Mercury

Result 0.0039

mg/Kg 1

Spike Amount Spike Units %Rec 0.004 mg/Kg 97.5

EnteredDate 07/23/2018

EnteredBy Ggorane

Units D.F.

SW-846 7470A

QCType Method DCS

	EnteredBy	csmith																										
	EnteredDate	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	07/24/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018	06/28/2018
	%Rec	155	311	108	100	106	118	96.5	843	105	8.66	1111	692	105	142	103	211	100	121	139	457	449	94.5	188	9.02	130	103	123
	Spike Units	mg/Kg																										
	Spike Amount	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	2.5	0.25	0.26275	0.125	0.25	0.5	0.25	0.25	0.25	0.25
	Units D.F.	mg/Kg 1																										
	Result	0.39	0.778	0.27	0.25	0.27	0.30	0.24	2.11	0.26	0.25	0.28	1.73	0.26	0.36	0.26	0.527	0.25	3.03	0.35	1.2	0.56	0.24	0.94	0.18	0.32	0.26	0.31
	Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Silica	Silicon	Silver	Sodium	Thallium	Titanium	Vanadium	Zinc
	Method	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C	SW-846 6010C
	QCType Method	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

	redBy	MKulkarni	alkarni	ulkarni	MKulkarni
	Ente	MKı	MKı	MKı	MKı
	nteredDate	06/29/2018	5/29/2018	5/29/2018	5/29/2018
			107 00	107 00	104 06
		mg/Kg			mg/Kg
	Spike Amount	25	25	25	75
1	D.F.		_	_	1
	Units	mg/Kg 1	mg/Kg 1	mg/Kg 1	mg/Kg 1
	Result	24.53	26.76	26.78	78.07
	Parameter	C6-C12	>C12-C28	>C28-C35	Total C6-C35
	Method	TX 1005	TX 1005	TX 1005	TX 1005
	QCType	DCS	DCS	DCS	DCS

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QCType	Method	Parameter	Result	Units	D.F.	Spike Amount	Spike Units	%Rec	EnteredDate	EnteredBy
	SW-846 8260C	1,1,1,2- Tetrachloroethane	0.00489	mg/L	_	0.004	mg/L	122	07/23/2018	Rajeev
	SW-846 8260C	1,1,1-Trichloroethane	0.00554	mg/L	-	0.004	mg/L	139	07/23/2018	Rajeev
	SW-846 8260C	1,1,2,2- Tetrachloroethane	0.00508	mg/L	-	0.004	mg/L	127	07/23/2018	Rajeev
	SW-846 8260C	1,1,2-Trichloroethane	0.00546	mg/L	_	0.004	mg/L	137	07/23/2018	Rajeev
	SW-846 8260C	1,1-Dichloroethane	0.00547	mg/L	_	0.004	mg/L	137	07/23/2018	Rajeev
	SW-846 8260C	1,1-Dichloroethylene	0.00531	mg/L	1	0.004	mg/L	133	07/23/2018	Rajeev
	SW-846 8260C	1,1-Dichloropropene	0.00511	mg/L	1	0.004	mg/L	128	07/23/2018	Rajeev
	SW-846 8260C	1,2,3-trichlorobenzene 0.00631	0.00631	mg/L		0.004	mg/L	158	07/23/2018	Rajeev
	SW-846 8260C	1,2,3- Trichloropropane	0.00539	mg/L	-	0.004	mg/L	135	07/23/2018	Rajeev
	SW-846 8260C	1,2,4- Trichlorobenzene	0.00565	mg/L	1	0.004	mg/L	141	07/23/2018	Rajeev
	SW-846 8260C	1,2,4- Trimethylbenzene	0.00524	mg/L	_	0.004	mg/L	131	07/23/2018	Rajeev
	SW-846 8260C	1,2-Dibromo-3- chloropropane	0.00547	mg/L	_	0.004	mg/L	137	07/23/2018	Rajeev
	SW-846 8260C	1,2-Dibromoethane	0.00435	mg/L	_	0.004	mg/L	109	07/23/2018	Rajeev
	SW-846 8260C	1,2-Dichlorobenzene	0.00503	mg/L	1	0.004	mg/L	126	07/23/2018	Rajeev
	SW-846 8260C	1,2-Dichloroethane	0.00522	mg/L	_	0.004	mg/L	131	07/23/2018	Rajeev
	SW-846 8260C	1,2-Dichloropropane	0.00498	mg/L	_	0.004	mg/L	125	07/23/2018	Rajeev
	SW-846 8260C	1,3,5- Trimethylbenzene	0.00522	mg/L	_	0.004	mg/L	131	07/23/2018	Rajeev
	SW-846 8260C	1,3-Dichlorobenzene	0.00551	mg/L	1	0.004	mg/L	138	07/23/2018	Rajeev
	SW-846 8260C	1,3-Dichloropropane	0.00468	mg/L	_	0.004	mg/L	117	07/23/2018	Rajeev
	SW-846 8260C	1,4-Dichlorobenzene	0.00571	mg/L	1	0.004	mg/L	143	07/23/2018	Rajeev
	SW-846 8260C	2,2-Dichloropropane	0.00542	mg/L	1	0.004	mg/L	136	07/23/2018	Rajeev
	SW-846 8260C	2-Chlorotoluene	0.00532	mg/L	_	0.004	mg/L	133	07/23/2018	Rajeev
	SW-846 8260C	4-Chlorotoluene	0.00535	mg/L	-	0.004	mg/L	134	07/23/2018	Rajeev
	SW-846 8260C	4-Isopropyltoluene	0.00525	mg/L	_	0.004	mg/L	131	07/23/2018	Rajeev
	SW-846 8260C	Benzene	0.00546	mg/L	_	0.004	mg/L	136	07/23/2018	Rajeev
				٥						

Page 115 of 123

	EnteredBy	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev
	EnteredDate	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018
	%Rec	135	140	117	128	143	139	129	158	134	148	131	103	129	128	122	122	123	127	119	92.3	123	149	126	133	114
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004
	D.F.	1	_	-	1	_	_	1	1	_	-	-	-	-	1	-	1	-	_	1	1	1	-	1	_	-
CAR	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Result	0.00539	0.00560	n 0.00469	0.00511	0.00572	0.00554	0.00514	0.00633	0.00535	0.00593	0.00523	0.00412	n 0.00516	0.00511	1a0.00489	0.00487	0.00493	0.0102	0.00477	0.00369	0.00493	0.00594	0.00504	0.00532	0.00456
	Parameter	Bromobenzene	Bromochloromethane	Bromodichloromethan 0.00469	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2- Dichloroethylene	cis-1,3- Dichloropropene	Dibromochloromethan 0.00516	Dibromomethane	Dichlorodifluorometha0.00489	Ethylbenzene	Isopropylbenzene	m- & p-Xylenes	MEK	Methylene chloride	MTBE	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene
	Method	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C
	QCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

						8 8	4				
QCType	QCType Method		Parameter	Result	Units	D.F.	Spike Amount	Spike Units %Rec	%Rec	EnteredDate	EnteredBy
DCS	SW-846 8260C		sec-Butylbenzene	0.00531	mg/L	-1	0.004	mg/L	133	07/23/2018	Rajeev
DCS	SW-846 8260C		Styrene	0.00450	mg/L	_	0.004	mg/L	112	07/23/2018	Rajeev
DCS	SW-846 8260C	7	t-butylbenzene	0.00523	mg/L	1	0.004	mg/L	131	07/23/2018	Rajeev
DCS	SW-846 8260C		Tetrachloroethylene	e 0.00551	mg/L	_	0.004	mg/L	138	07/23/2018	Rajeev
DCS	SW-846 8260C		Toluene	0.00554	mg/L	1	0.004	mg/L	138	07/23/2018	Rajeev
DCS	SW-846 8260C	1 1	trans-1,2- Dichloroethylene	0.00525	mg/L	_	0.004	mg/L	131	07/23/2018	Rajeev
DCS	SW-846 8260C	- H	trans-1,3- Dichloropropene	0.00517	mg/L	_	0.004	mg/L	129	07/23/2018	Rajeev
DCS	SW-846 8260C		Trichloroethylene	0.00496	mg/L	_	0.004	mg/L	124	07/23/2018	Rajeev
DCS	SW-846 8260C	1 - 0	Trichlorofluoromethan 0.00406 e	han 0.00406	mg/L	-	0.004	mg/L	102	07/23/2018	Rajeev
DCS	SW-846 8260C		Vinyl Chloride	0.00598	mg/L	1	0.004	mg/L	149	07/23/2018	Rajeev
DCS	SW-846 8260C	-	Xylenes	0.01476	mg/L	-	0.012	mg/L	123	07/28/2018	Rajeev



## Laboratory Data Package Cover Page

This data package is for Job No. 18061280 and laboratory batch no(s). Qb18062523,Qb18062530,Qb18062580,Qb18062622,Qb18062625,Qb18062645,Qb18062646,Qb18062782,Qb18062808,Qb18062946,Qb18071645,Qb18071646 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. deanup methods, and
  - e, if required for the project, tentatively identified compounds (TICs),
- R4 Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - c. LCS spiking amounts,
  - d. Calculated %R for each analyte, and
  - e. The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - f. Samples associated with the MS/MSD clearly identified,
  - g. MS/MSD spiking amounts,
  - h. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - i. Calculated %Rs and relative percent differences (RPDs), and
  - j. The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - k. The amount of analyte measured in the duplicate,
  - I. The calculated RPD, and
  - m. The laboratory's QC limits for analytical duplicates.
- M R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/ anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [] This laboratory meets an exception under 30 TAC §25.6 and was last inspection by [] TCEQ or [] \_\_\_\_\_\_ on \_\_\_\_\_. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible forreleasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Alisha Hughes	arism Hugues	Project Manager	07/31/2018



Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

A&B Job ID: 18061280 Reviewed By: AHughes

Date Reviewed: 07/31/2018

Prep Batch Number(s): Qb18062523,Qb18062530,Qb18062580,Qb18062622,Qb18062625,Qb18062645,Qb18062646,Qb180 62782,Qb18062808,Qb18062946,Qb18071645,Qb18071646

#	Α	Description	Yes	No	NA	NR	ER#
R1	OI	Chain-of Custody					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				
		2) Were all departures from standard conditions described in an exception report?	X				
22	OI	Sample and Quality Control (QC) Identification					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross referenced to corresponding QC data?	X				
R3	OI	Test Reports					
		1) Were all samples prepared and analyzed within holding times?		X			R3/1
		2) Other than those results <mql, all="" calibration="" other="" range?<="" reported="" results="" td="" were="" within=""><td></td><td>X</td><td></td><td></td><td>R3/2</td></mql,>		X			R3/2
		3) Were calculations subject to appropriate checks?	X				
		4) Were all analyte identifications subject to appropriate checks?	X				
		5) Were all sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?	X				
		7) Was % moisture (or solids) reported for all samples?	X				
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035	Х				
		9) If required for the project, were tentatively dentified compounds (TICs) reported?			X		
R4	OI	Surrogate Recovery Data					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries (%R) within the laboratory QC limits?	X				
R5	OI	Test Reports/Summary Forms for Blank Samples					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	Х				
		4) Were blanks free of detected target compounds and, if applicable, reported TICs?	X				
R6	OI	Laboratory Control Samples (LCS)					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps ?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			R6/4
		5) Were LCSs spiked at or below the LORP or do the detectability data document the laboratory's capability of detecting the COCs in samples spiked at the MDL?	X				
		6) Was the LCSD RPD within QC limits?		X			R6/6
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %R within the laboratory QC limits?		X			R7/3
		4) Were MS/MSD RPDs within laboratory QC limits?		X			R7/4
R8	OI	Analytical Duplicate Data					
		Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?		X			R8/3
R9	OI	Method Quatitation Limits MQLs)					
		Are the MQLs for each method analyte listed and included in the laboratory data package?	X	-			
		Do the MQLs correspond to the concentration of the lowest non-zero standard?	X				



Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

Reviewed By: AHughes

A&B Job ID:

18061280

Date Reviewed: 07/31/2018

Prep Batch Number(s): Qb18062523,Qb18062530,Qb18062580,Qb18062622,Qb18062625,Qb18062645,Qb18062646,Qb180 62782,Qb18062808,Qb18062946,Qb18071645,Qb18071646

#	Α	Description	Yes	No	NA	NR	ER#
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?		X			R10/1
		2) Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	X				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	Х				

		INITIAL CALIBRATION (ICAL)				
- 1		1) Were response factors (RFs) and/or relative response factors (RRFs) for each analyte within the QC limits?	X			
		2) Were percent RSDs or correlation coefficient criteria met?	X			
		3) Were the number of standards recommended in the method used for all analytes?	X			
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X			
		5) Are ICAL data available for instruments used?	X			
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X			
S2	OI	INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICCV AND CCV) AND CONTINUING CALIBRATION BLANK (CCB):				
		1) Was the CCV analyzed at the method-required frequency?	X			
		2) Were percent differences for each analyte within the method-required QC limits?	X			
		3) Was the ICAL curve verified for each analyte?	X			
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X			
S3	0	MASS SPECTRAL TUNING:				
		1) Was the appropriate compound for the method used for tuning?	X			
		2) Were ion abundance data within the method-required QC limits?	X			
S4	0	INTERNAL STANDARDS (IS):				
		Were IS area counts and retention times within the method-required QC limits?	X			
S5	OI	Raw data (NELAC Section 5.5.10)				
		1) Were the raw data (e.g., chromatograms, and spectral data) reviewed by an analyst?	X			
		2) Were data associated with manual integrations flagged on the raw data?	X			
S6	OI	DUAL COLUMN CONFIRMATION				
		Did dual column confirmation results meet the method-required QC?	X			
S7	OI	TENTATIVELY IDENTIFIED COMPOUNDS (TICS):				
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X	
S8	OI	INTERFERENCE CHECK SAMPLE (ICS) RESULTS:				
		Were percent recoveries within method QC limits?	X			
S9	OI	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD ADDITIONS				
		Were percent differences, recoveries, and the linearity within the QC limits		X		S9
S10	OI	VERIFICATION/VALIDATION DOCUMENTATION FOR METHODS				
		Are all methods documented and verified and validated, where applicable, (NELAC 5.10.2 or ISO/IEC 17025 Section 5.4.5)?	X			
S11	OI	METHOD DETECTION LIMIT (MDL) STUDIES				
		1) Was a MDL study performed for each reported analyte?	X			
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X			
S12	OI	STANDARDS DOCUMENTATION				
		Are the standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X			



Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

A&B Job ID: 18061280 Reviewed By: AHughes

Date Reviewed: 07/31/2018

Prep Batch Number(s): Qb18062523,Qb18062530,Qb18062580,Qb18062622,Qb18062625,Qb18062645,Qb18062646,Qb180 62782,Qb18062808,Qb18062946,Qb18071645,Qb18071646

#	Α	Description	Yes	No	NA	NR	ER#
S13	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES					
		Are the procedures for compound/analyte identification documented?	X				
S14	OI	DEMONSTRATION OF CAPABILITY (DOC)					
		1) Was DOC conducted generally consistent with NELAC 5C or ISO/IEC 4.2.2?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	PROFICIENCY TEST REPORTS:					
		Are proficiency testing or inter-laboratory comparison results on file?	X				
S16	OI	LABORATORY STANDARD OPERATING PROCEDURES (SOPS):					
		Are laboratory SOPs current and on file for each method performed?	X				

ER#		EXCEPTIO	N	
R3/1	One or more samples were tested for Cyanide	outside the method hol	ding time per client e	mail.
	( H1 )MW-02 (1)	18061280.03	Qb18071645	Cyanide_Total
	( H1 )SB-05 (5)	18061280.15	Qb18071646	Cyanide_Total
	( H3 )MW-02 (1)	18061280.03	Qb18071645	Cyanide_Total
	( H3 )MW-02 (10)	18061280.04	Qb18071645	Cyanide_Total
	( H3 )SB-01 (5)	18061280.06	Qb18071645	Cyanide_Total
	( H3 )SB-01 (10)	18061280.07	Qb18071645	Cyanide_Total
	( H3 )SB-02 (5)	18061280.08	Qb18071645	Cyanide_Total
	( H3 )SB-02 (9)	18061280.09	Qb18071645	Cyanide_Total
	( H3 )SB-04 (5)	18061280.10	Qb18071645	Cyanide_Total
	( H3 )SB-04 (10)	18061280.11	Qb18071645	Cyanide_Total
	( H3 )SB-03 (5)	18061280.13	Qb18071645	Cyanide_Total
	( H3 )SB-03 (10)	18061280.14	Qb18071645	Cyanide_Total
	( H3 )SB-05 (5)	18061280.15	Qb18071646	Cyanide_Total
	( H3 )SB-05 (10)	18061280.16	Qb18071646	Cyanide_Total
R3/2	J - Estimation. Below calibration range but a	above MDL.		
	( J )MW-02 (1)	18061280.03	Qb18071645	Cyanide_Total
	( J )MW-02 (10)	18061280.04	Qb18062808	Metals
	( J )SB-01 (10)	18061280.07	Qb18062808	Metals
	( J )SB-02 (9)	18061280.09	Qb18062782	Mercury
	( J )SB-02 (9)	18061280.09	Qb18062808	Metals
	( J )SB-04 (5)	18061280.10	Qb18062808	Metals
	( J )SB-10 (5)	18061280.12	Qb18062808	Metals
	( J )SB-03 (5)	18061280.13	Qb18062782	Mercury



Project Name: 01723.062.007.0002 / Mckinney Phase II Houston, TX

A&B Job ID: 18061280 Reviewed By: AHughes

Date Reviewed: 07/31/2018

Qb18062523, Qb18062530, Qb18062580, Qb18062622, Qb18062625, Qb18062645, Qb18062646, Qb18062782, Qb18062808, Qb18062946, Qb18071645, Qb18071646Prep Batch Number(s):

ER#			EXCEPTIO	N	
		( J )SB-03 (5)	18061280.13	Qb18062808	Metals
		( J )SB-03 (10)	18061280.14	Qb18062782	Mercury
		( J )SB-03 (10)	18061280.14	Qb18062625	Metals
		(J)SB-05(5)	18061280.15	Qb18062625	Metals
		(J)SB-05 (10)	18061280.16	Qb18062782	Mercury
		( J )SB-05 (10)	18061280.16	Qb18062625	Metals
R6/4	L2 - Associated L	.CS and/or LCSD recovery is	below acceptance lim	its for flagged analyt	e. Bias may be low.
(	L2)2,2-Dichloropropane		****	Qb18062523	VOC
R6/6	R1 - RPD exceed	Is control limits.			
	(R1)Chloromethane			Qb18062530	VOC
		( R1 )062018MR-001 Coating Material	18061158.01	Qb18062646	%Moisture
R7/3	accuracy of the spi	ke recovery value is reduced:	since the analyte con-	centration in the sam	s due to matrix interference., M3- ple is disproportionate to spike level ry is below laboratory control limits.
	(	M2 )Bolivar Sand Pit - #1	18061036.01	Qb18062625	Metals
		( M3 )MW-02 (1)	18061280.03	Qb18062808	Metals
		( M9 )RB-1	18061126.03	Qb18062523	VOC
		( M9 )MW-02 (1)	18061280.03	Qb18062808	Metals
₹7/4	R1 - RPD exceed	is control limits.			
R8/3	R1 - RPD exceed	ds control limits.			
R10/1	DCS report are on	file. Please contact your Proj	ect Manager if neede	d.	
59		ysis - QB Batch ID: Qb180626 oratory control limits. The sar			the recovery for Nickel is 75.8%, whis job ID.
55		bratory control milits. The sai	inpic docasion tino batt	aria not induded in t	105 151

O = organic analyses;

I = inorganic analyses (and general chemistry, when applicable);

NA = Not applicable;

NR = Not Reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

#### AMENDED

## Laboratory Analysis Report

Job ID: 18061440



10100 East Freeway, Suite 100, Houston, TX 77029 tel: 713-453-6060, fax: 713-453-6091, http://www.ablabs.com

#### Client Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Report To:

Client Name:

Attn:

Weston Solutions

Dawn Denham

5599 San Felipe Suite 700

Client Address:

City, State, Zip: Houston, Texas, 77056 P.O.# .: 0092142

Total Number of Pages: 62

Sample Collected By: Rachel Omerza

Date Collected: 06/26/18

#### A&B Labs has analyzed the following samples...

Matrix	A&B Sample ID
Water	18061440.01
Water	18061440.02
Water	18061440.03
Water	18061440.04
Water	18061440.05
	Water Water Water Water

ausm Hugus

Released By: Alisha Hughes

Title:

Project Manager

Date:

7/31/2018



This Laboratory is NELAP (T104704213-18-17) accredited. Effective: 4/1/2018; Expires: 3/31/2019

Scope: Non-Potable Water, Drinking Water, Air, Solid, Biological Tissue, Hazardous Waste

I am the laboratory manager, or his/her designee, and I am responsible for the release of this data package. This laboratory data package has been reviewed and is complete and technically compliant with the requirements of the methods used, except where noted in the attached exception reports. I affirm, to the best of my knowledge that all problems/anomalies observed by this laboratory (and if applicable, any and all laboratories subcontracted through this laboratory) that might affect the quality of the data, have been identified in the Laboratory Review Checklist, and that no information or data have been knowingly withheld that would affect the quality of the data.

This report cannot be reproduced, except in full, without prior written permission of A&B Labs. Results shown relate only to the items tested. Samples are assumed to be in acceptable condition unless otherwise noted. Blank correction is not made unless otherwise noted. Air concentrations reported are based on field sampling information provided by client. Soil samples are reported on a wet weight basis unless otherwise noted. Uncertainty estimates are available on request.

REVISED Date Received: 06/26/2018 15:36

> Page 1 of 62 Report Number: RPT180731008

## LABORATORY TERM AND QUALIFIER DEFINITION REPORT



Job ID: 18061440

Date:

7/31/2018

#### General Term Definition

Back-Wt	Back Weight	Post-Wt	Post Weight
BRL	Below Reporting Limit	ppm	parts per million
cfu	colony-forming units	Pre-Wt	Previous Weight
Conc.	Concentration	Q	Qualifier
D.F.	Dilution Factor	RegLimit	Regulatory Limit
Front-Wt	Front Weight	RPD	Relative Percent Difference
LCS	Laboratory Check Standard	RptLimit	Reporting Limit
LCSD	Laboratory Check Standard Duplicate	SDL	Sample Detection Limit
MS	Matrix Spike	surr	Surrogate

MS Matrix Spike surr Surroga MSD Matrix Spike Duplicate T Time

MW Molecular Weight TNTC Too numerous to count

J Estimation. Below calibration range but above MDL

#### Qualifier Definition

J	Estimation. Below calibration range but above MDL.	
M8	Matrix Spike and/or Matrix Spike Duplicate recovery is above laboratory control limits.	
U	Undetected at SDL (Sample Detection Limit).	



Client Sample ID: TB-2

A&B Job Sample ID: 18061440.01

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Volatile Organic Compounds** 

Analytical Method: SW-846 8260C QC Batch ID: Prep Method:

Qb18062711 SW-846 5030C Jdongre

PB18062706

Prep Batch ID Analyst Initial

Prepared By:

JKD

Sample Matrix Water Date Collected 06/26/2018

Date Received Date Prepared 06/26/2018 15:36

06/26/2018 16:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
79-34-5	1,1,2,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
79-00-5	1,1,2-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-35-4	1,1-Dichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
87-61-6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
96-12-8	1,2-Dibromo-3-chloro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
106-93-4	1,2-Dibromoethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
95-50-1	1,2-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
78-87-5	1,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
108-67-8	1,3,5-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
142-28-9	1,3-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
106-46-7	1,4-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/26/18 19:22
594-20-7	2,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
95-49-8	2-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
106-43-4	4-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 19:23
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:23
74-97-5	Bromochloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
75-27-4	Bromodichloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
75-25-2	Bromoform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
74-83-9	Bromomethane	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 19:2
75-15-0	Carbon disulfide	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
56-23-5	Carbon tetrachloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
108-90-7	Chlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
75-00-3	Chloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:2
67-66-3	Chloroform	<0.00100	U	0.00100		0.001	0.005	0.05	mg/L	1	06/26/18 19:2

**REVISED** 

Soil results reported on dry weight basis



Client Sample ID: TB-2 A&B Job Sample ID: 18061440.01 Date: 7/31/2018

Attn: Dawn Denham

Client Name:

Weston Solutions

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Water

Analytical Method:

Volatile Organic Compounds SW-846 8260C

QC Batch ID: Prep Method:

Test Description:

Qb18062711 SW-846 5030C

Prepared By:

Jdongre

Prep Batch ID

PB18062706

Analyst Initial

JKD

Sample Matrix

Water

Date Collected

06/26/2018

Date Received

06/26/2018 15:36

Date Prepared

06/26/2018 16:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
74-95-3	Dibromomethane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-71 <b>-</b> 8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 19:22
100-41-4	Ethylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/26/18 19:22
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 19:22
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
103-65-1	n-Propylbenzene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
95-47-6	o-Xylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
100-42-5	Styrene	0.00356	J	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
98-06-6	t-butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
156-60-5	trans-1,2-Dichloroethy	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-69-4	Trichlorofluoromethan	<0.00100	บ	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
75-01-4	Vinyl Chloride	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 19:22
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/26/18 19:22
17060-07-0	1,2-Dichloroethane-d4	91					70	130	%	1	06/26/18 19:22
1868-53-7	Dibromofluoromethan	93.3					70	130	%	1	06/26/18 19:22
2037-26-5	Toluene-d8(surr)	101					70	130	%	1	06/26/18 19:22
460 <b>-00-</b> 4	p-Bromofluorobenzen	125					70	130	%	1	06/26/18 19:22







Client Sample ID: MW-1

A&B Job Sample ID: 18061440.02

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Test Description: Total Recoverable Metals

Analytical Method: EPA 200.7
QC Batch ID: Qb18062960
Prep Method: EPA 200.7
Prepared By: Mwissman

Prep Batch ID PB18062924

Analyst Initial CAS

Sample Matrix Water

Date Collected 06/26/2018 11:40

Date Received 06/26/2018 15:36 Date Prepared 06/29/2018 07:50

% Moisture

	e remains			22.				Shift ary and a second			
CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-38-2	Arsenic	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-39-3	Barium	0.102		0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-41-7	Beryllium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-43-9	Cadmium	<0.002	U	0.002	0.01	0.002	0.01	1	mg/L	1	06/29/18 19:45
7440-47-3	Chromium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7439-92-1	Lead	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-02-0	Nickel	0.0100	J	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7782-49-2	Selenium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:45
7440-22-4	Silver	<0.001	U	0.001	0.01	0.001	0.01	1	mg/L	1	06/29/18 19:45

7.31.18



Client Sample ID: MW-1

A&B Job Sample ID: 18061440.02

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

Total Metals - Mercury

Analytical Method: QC Batch ID:

Prep Method:

EPA 245.1 Qb18070377 EPA 245.1

Prepared By: Prep Batch ID

JYou PB18070346

Analyst Initial GG

Sample Matrix Water

Date Collected
Date Received

Date Prepared

06/26/2018 11:40 06/26/2018 15:36

07/03/2018 09:32

% Moisture

CAS Number Parameter Result Flag SDL SQL MDL MQL UQL Units DF Date/Time 7439-97-6 Mercury <6E-05 U 6E-05 0.00020 0.00006 0.0002 0.01 mg/L 1 07/03/18 13:56

MU7.31-18



Client Sample ID: MW-1

A&B Job Sample ID: 18061440.02

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description: Hexavalent Chromium

Analytical Method: SM 3500Cr B

Prep Method:

Prepared By: Prep Batch ID

Analyst Initial AJ

QC Batch ID: Qb18062750

Sample Matrix Water

Date Collected 06/26/2018 11:40 Date Received 06/26/2018 15:36

Date Prepared

% Moisture

CAS Number MDL MQL UQL Units DF Date/Time Parameter Result SDL SQL Flag 06/27/18 11:33 Chromium, Hexavalen < 0.002 U 0.002 0.01 0.002 0.01 0.2 mg/L 1

7-31-18



Client Sample ID: MW-1 A&B Job Sample ID: 18061440.02 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Total Cyanide** 

Analytical Method: QC Batch ID: SM 4500CNC/E Qb18071006 SM 4500CNC/E

Prep Method: Prepared By: Prep Batch ID

LEBell PB18071005

Analyst Initial LEB

Sample Matrix Water

Date Collected Date Received

06/26/2018 11:40 06/26/2018 15:36

Date Prepared

07/09/2018 14:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	<0.01	U	0.01	0.01	0.006	0.01	0.2	mg/L	1	07/09/18 19:30



Client Sample ID: MW-1

A&B Job Sample ID: 18061440.02

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Purgeable Aromatics** 

Analytical Method: QC Batch ID: Prep Method:

SW-846 8260C Qb18062711 SW-846 5030C

Prepared By: Prep Batch ID Jdongre PB18062706

Analyst Initial JKD

Sample Matrix

Date Collected

Water

Date Received

06/26/2018 11:40 06/26/2018 15:36

Date Prepared

06/26/2018 16:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
71-43-2	Benzene	<0.00035	U	0.00035	0.005	0.00035	0.005	0.05	mg/L	1	06/26/18 19:58
108-88-3	Toluene	<0.00028	U	0.00028	0.005	0.00028	0.005	0.05	mg/L	1	06/26/18 19:58
100-41-4	Ethylbenzene	0.00487	3	0.00035	0.005	0.00035	0.005	0.05	mg/L	1	06/26/18 19:58
108-38-3&106-4	m- & p-Xylenes	<0.00060	U	0.00060	0.01	0.0006	0.010	0.10	mg/L	1	06/26/18 19:58
95-47-6	o-Xylene	<0.00250	U	0.00250	0.005	0.0025	0.005	0.05	mg/L	1	06/26/18 19:58
1330-20-7	Xylenes	<0.00820	U	0.00820	0.015	0.0082	0.015	0.15	mg/L	1	06/26/18 19:58
17060-07-0	1,2-Dichloroethane-d4	102					70	130	%	1	06/26/18 19:58
1868-53-7	Dibromofluoromethan	111					70	130	%	1	06/26/18 19:58
2037-26-5	Toluene-d8(surr)	102					70	130	%	-1	06/26/18 19:58
460-00-4	p-Bromofluorobenzen	122					70	130	%	1	06/26/18 19:58

W7 8



Client Sample ID: MW-1 A&B Job Sample ID: 18061440.02 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

Semivolatile Organic Compounds

Analytical Method: SW-846 8270D QC Batch ID: Qb18062919 Prep Method: SW-846 3510C Prepared By: MMuteen Prep Batch ID PB18062835

Sample Matrix Water

Date Collected 06/26/2018 11:40 Date Received 06/26/2018 15:36 Date Prepared

06/28/2018 09:30

Analyst Initial

VMN

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
83-32-9	Acenaphthene	<0.00500	U	0.00500	0.005	0.005	0.005	0.1	mg/L	1	06/28/18 17:54
208-96-8	Acenaphthylene	<0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
120-12-7	Anthracene	<0.00500	U	0.00500	0.005	0.005	0.005	0.1	mg/L	1	06/28/18 17:54
56-55-3	Benzo(a)anthracene	< 0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
50-32-8	Benzo(a)pyrene	<0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
205-99-2	Benzo(b)fluoranthene	<0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
191-24-2	Benzo(g,h,i)perylene	<0.00500	U	0.00500	0.005	0.005	0.005	0.1	mg/L	1	06/28/18 17:54
207-08-9	Benzo(k)fluoranthene	<0.00300	U	0.00300	0.005	0.003	0.005	0.1	mg/L	1	06/28/18 17:54
218-01-9	Chrysene	<0.00200	U	0.00200	0.005	0.002	0.005	0.1	mg/L	1	06/28/18 17:54
53-70-3	Dibenzo(a,h)anthrace	<0.00500	U	0.00500	0.005	0.005	0.005	0.1	mg/L	1	06/28/18 17:54
132-64-9	Dibenzofuran	<0.00300	U	0.00300	0.005	0.003	0.005	0.1	mg/L	1	06/28/18 17:54
206-44-0	Fluoranthene	<0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
86-73-7	Fluorene	<0.00600	U	0.00600	0.005	0.006	0.005	0.1	mg/L	1	06/28/18 17:54
193-39-5	Indeno(1,2,3-cd)pyre	<0.00500	U	0.00500	0.005	0.005	0.005	0.1	mg/L	1	06/28/18 17:54
91-20-3	Naphthalene	< 0.00400	U	0.00400	0.005	0.004	0.005	0.1	mg/L	1	06/28/18 17:54
85-01 <b>-</b> 8	Phenanthrene	<0.00300	U	0.00300	0.005	0.003	0.005	0.1	mg/L	1	06/28/18 17:54
129-00-0	Pyrene	<0.00600	U	0.00600	0.005	0.006	0.005	0.1	mg/L	1	06/28/18 17:54
118-79-6	2,4,6-Tribromophenol	71.7					19	122	%	1	06/28/18 17:54
13127-88-3	Phenol-d6(surr)	30.5					10	130	%	1	06/28/18 17:54
132-60-8	2-Fluorobiphenyl(surr)	78					30	115	%	1	06/28/18 17:54
1718-51-0	p-Terphenyl-d14(surr)	85.2					18	137	%	1	06/28/18 17:54
367-12-4	2-Fluorophenol(surr)	47.4					15	115	%	1	06/28/18 17:54
4165-60-0	Nitrobenzene-d5(surr)	69.8					23	120	%	1	06/28/18 17:54



Client Sample ID: MW-1

A&B Job Sample ID: 18061440.02

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Total Petroleum Hydrocarbons** 

Analytical Method: TX 1005
QC Batch ID: Qb18062807
Prep Method: TX 1005

Prepared By: MKulkarni Prep Batch ID PB18062806

Analyst Initial MMK

Sample Matrix Water

Date Collected 06/26/2018 11:40 Date Received 06/26/2018 15:36

06/27/2018 11:30

% Moisture

Date Prepared

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
TPH-1005-1	C6-C121	<0.59	U	0.59	1.35	0.66	1.5	60	mg/L	0.90	06/28/18 13:56
TPH-1005-2	>C12-C281	<0.77	U	0.77	1.35	0.86	1.5	60	mg/L	0.90	06/28/18 13:56
TPH-1005-4	>C28-C351	<0.68	U	0.68	1.35	0.75	1.5	60	mg/L	0.90	06/28/18 13:56
	Total C6-C35	< 0.77	U	0.77		0.86			mg/L	0.90	06/28/18 13:56
111-85-3	1-Chlorooctane(surr)	89.1					59	122	%	0.90	06/28/18 13:56
3386-33-2	Chlorooctadecane(sur	98.9					48	123	%	0.90	06/28/18 13:56

7-31-18



Client Sample ID: MW-12 A&B Job Sample ID: 18061440.03 Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

Total Recoverable Metals

Analytical Method:

QC Batch ID:

Prep Method:

EPA 200.7 Qb18062960 EPA 200.7

Prepared By: Prep Batch ID

Mwissman PB18062924

Analyst Initial

CAS

Sample Matrix Water

Date Collected
Date Received
Date Prepared

06/26/2018 13:03 06/26/2018 15:36

06/29/2018 07:50

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SOL	MDL	MOL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-38-2	Arsenic	< 0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-39-3	Barium	0.0800		0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-41-7	Beryllium	< 0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-43-9	Cadmium	<0.002	U	0.002	0.01	0.002	0.01	1	mg/L	1	06/29/18 19:49
7440-47-3	Chromium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7439-92-1	Lead	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-02-0	Nickel	0.0150		0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7782-49-2	Selenium	0.004	J	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:49
7440-22-4	Silver	<0.001	U	0.001	0.01	0.001	0.01	1	mg/L	1	06/29/18 19:49

MITTINE



Client Sample ID: MW-12

A&B Job Sample ID: 18061440.03

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Test Description: Total Metals - Mercury

Analytical Method: EPA 245.1 QC Batch ID: Qb18070377

Prep Method: EPA 245.1

Prepared By:

JYou

Prep Batch ID PB18070346

Analyst Initial GG

Sample Matrix Water

Date Collected 06/26/2018 13:03 Date Received 06/26/2018 15:36

Date Prepared 07/03/2018 09:32

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	<6E-05	U	6E-05	0.00020 0.00006	0.0002	0.01	mg/L	1	07/03/18 14:05

7318





Client Sample ID: MW-12

A&B Job Sample ID: 18061440.03

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Hexavalent Chromium** 

Analytical Method:

SM 3500Cr B Qb18062750

QC Batch ID: Prep Method: Prepared By: Prep Batch ID

Analyst Initial AJ

Sample Matrix

Water Date Collected

Date Received

06/26/2018 13:03 06/26/2018 15:36

Date Prepared

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
	Chromium, Hexavalen	<0.002	U	0.002	0.01	0.002	0.01	0.2	mg/L	1	06/27/18 11:33



Client Sample ID: MW-12 A&B Job Sample ID: 18061440.03

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Test Description: **To**Analytical Method: SM

**Total Cyanide** SM 4500CNC/E Qb18071006

SM 4500CNC/E

Prep Method: Prepared By: Prep Batch ID

QC Batch ID:

LEBell PB18071005

Analyst Initial

LEB

Sample Matrix Water

 Date Collected
 06/26/2018 13:03

 Date Received
 06/26/2018 15:36

 Date Prepared
 07/09/2018 14:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	<0.01	U	0.01	0.01	0.006	0.01	0.2	mg/L	1	07/09/18 19:30

MO 13/18





Client Sample ID: MW-12 A&B Job Sample ID: 18061440.03 Date: 7/31/2018

Client Name: Project Name:

Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Volatile Organic Compounds** 

Analytical Method:

QC Batch ID:

SW-846 8260C Qb18062711 SW-846 5030C

Prepared By: Prep Batch ID

Prep Method:

Jdongre PB18062706

Analyst Initial

JKD

Sample Matrix Water

Date Collected C

06/26/2018 13:03 06/26/2018 15:36

06/26/2018 16:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
79-34-5	1,1,2,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
79-00-5	1,1,2-Trichloroethane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-35-4	1,1-Dichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
87-61-6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
96-12-8	1,2-Dibromo-3-chloro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
106-93-4	1,2-Dibromoethane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
95-50-1	1,2-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
78-87-5	1,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
108-67-8	1,3,5-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
142-28-9	1,3-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
106-46-7	1,4-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/26/18 20:3!
594-20-7	2,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
95-49-8	2-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3!
106-43-4	4-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 20:35
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3!
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
74-97-5	Bromochloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
75-27-4	Bromodichloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3
75-25-2	Bromoform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:3!
74-83-9	Bromomethane	<0.00200	U	0.00200		0.002	0.005	0.05	mg/L	1	06/26/18 20:3
75-15-0	Carbon disulfide	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
56-23-5	Carbon tetrachloride	<0.00100		0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
108-90-7	Chlorobenzene	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/26/18 20:3
75-00-3	Chloroethane	<0.00100		0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
57-66-3	Chloroform	<0.00100		0.00100		0.001	0.005	0.05	mg/L	1	06/26/18 20:35

**REVISED** 

Soil results reported on dry weight basi

Page 16 of 62



Client Sample ID: MW-12 A&B Job Sample ID: 18061440.03

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Test Description: Volatile Organic Compounds

Analytical Method: SW-846 8260C
QC Batch ID: Qb18062711
Prep Method: SW-846 5030C
Prepared By: Jdongre
Prep Batch ID PB18062706

Analyst Initial JKD

% Moisture

Sample Matrix

Date Collected

Date Received

Date Prepared

Water

06/26/2018 13:03

06/26/2018 15:36

06/26/2018 16:00

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
74-95-3	Dibromomethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-71-8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 20:35
100-41-4	Ethylbenzene	0.00487	J	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/26/18 20:35
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 20:35
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
103-65-1	n-Propylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
95-47-6	o-Xylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
100-42-5	Styrene	0.00389	8 []	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
98-06-6	t-butylbenzene	<0.00100	ับ	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
156-60-5	trans-1,2-Dichloroethy	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-69-4	Trichlorofluoromethan	<0.00100	บ	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
75-01-4	Vinyl Chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 20:35
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/26/18 20:35
17060-07-0	1,2-Dichloroethane-d4	104					70	130	%	1	06/26/18 20:35
1868-53-7	Dibromofluoromethan	109					70	130	%	1	06/26/18 20:35
2037-26-5	Toluene-d8(surr)	102					70	130	%	1	06/26/18 20:35
460-00-4	p-Bromofluorobenzen	122					70	130	%	1	06/26/18 20:35

ME7 8



Client Sample ID: MW-2 A&B Job Sample ID: 18061440.04 Date: 7/31/2018

Client Name: Project Name:

Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description:

**Total Recoverable Metals** 

Analytical Method: QC Batch ID: EPA 200.7 Qb18062960 EPA 200.7 Mwissman

Prepared By: Prep Batch ID

Prep Method:

PB18062924

Analyst Initial

CAS

Sample Matrix Water

Date Collected Date Received Date Prepared

06/26/2018 13:33 06/26/2018 15:36

06/29/2018 07:50

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7440-36-0	Antimony	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-38-2	Arsenic	0.005	J	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-39-3	Barium	0.0840		0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-41-7	Beryllium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-43-9	Cadmium	<0.002	U	0.002	0.01	0.002	0.01	1	mg/L	1	06/29/18 19:53
7440-47-3	Chromium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7439-92-1	Lead	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-02-0	Nickel	0.0150		0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7782-49-2	Selenium	<0.004	U	0.004	0.01	0.004	0.01	1	mg/L	1	06/29/18 19:53
7440-22-4	Silver	< 0.001	U	0.001	0.01	0.001	0.01	1	mg/L	1	06/29/18 19:53

M (1) 1 (8

Client Sample ID: MW-2

A&B Job Sample ID: 18061440.04

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description: Total Metals - Mercury

Analytical Method: EPA 245.1 QC Batch ID: Qb18070377 Prep Method:

EPA 245.1

Prepared By:

JYou

Prep Batch ID

PB18070346

Analyst Initial

GG

Sample Matrix

Water

Date Collected Date Received 06/26/2018 13:33

Date Prepared

06/26/2018 15:36

07/03/2018 09:32

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
7439-97-6	Mercury	<6E-05	U	6E-05	0.00020	0.00006	0.0002	0.01	mg/L	1	07/03/18 14:08

n107 1.3118



Client Sample ID: MW-2

A&B Job Sample ID: 18061440.04

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Date: 7/31/2018

Attn: Dawn Denham

Test Description:

**Hexavalent Chromium** 

Analytical Method: QC Batch ID: Qb18062750

SM 3500Cr B

Prep Method: Prepared By:

Prep Batch ID

Analyst Initial AJ

Sample Matrix

Date Collected Date Received

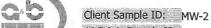
06/26/2018 13:33 06/26/2018 15:36

Water

Date Prepared

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
	Chromium, Hexavalen	<0.002	U	0.002	0.01	0.002	0.01	0.2	mg/L	1	06/27/18 11:33



A&B Job Sample ID: 18061440.04

Date: 7/31/2018

Client Name: Project Name: Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Attn: Dawn Denham

Test Description: Analytical Method: SM 4500CNC/E QC Batch ID:

**Total Cyanide** Qb18071006 SM 4500CNC/E

Prepared By: Prep Batch ID

Prep Method:

PB18071005 Analyst Initial LEB

LEBell

Sample Matrix

Water

Date Collected Date Received 06/26/2018 13:33 06/26/2018 15:36

Date Prepared

07/09/2018 14:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
57-12-5	Cyanide	<0.01	U	0.01	0.01	0.006	0.01	0.2	mg/L	1	07/09/18 19:30

nl7 1-3/18



Client Sample ID: MW-2 A&B Job Sample ID: 18061440.04 Date: 7/31/2018

Client Name:

Weston Solutions

01723.062.007.0002 / COH Brownfields Mckinney Phase II Project Name:

Attn: Dawn Denham

Test Description:

**Volatile Organic Compounds** 

Analytical Method: SW-846 8260C QC Batch ID: Qb18062711 Prep Method: SW-846 5030C Prepared By: Jdongre Prep Batch ID PB18062706

Sample Matrix Water

Date Collected 06/26/2018 13:33 Date Received 06/26/2018 15:36 06/26/2018 16:00

Date Prepared

Analyst Initial

JKD

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
79-34-5	1,1,2,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
79-00-5	1,1,2-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-35-4	1,1-Dichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
87-61-6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
96-12-8	1,2-Dibromo-3-chloro	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
106-93-4	1,2-Dibromoethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
95-50-1	1,2-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
78-87-5	1,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
108-67-8	1,3,5-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
142-28 <b>-</b> 9	1,3-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
106-46-7	1,4-Dichlorobenzene	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/26/18 21:11
594-20-7	2,2-Dichloropropane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
95-49-8	2-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
106-43-4	4-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 21:11
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
74-97-5	Bromochloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-27-4	Bromodichloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-25-2	Bromoform	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
74-83-9	Bromomethane	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 21:11
75-15 <b>-</b> 0	Carbon disulfide	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
56-23-5	Carbon tetrachloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
108-90-7	Chlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-00-3	Chloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
67-66-3	Chloroform	<0.00100	11	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11

**REVISED** 

Soil results reported on dry weight basis



Test Description:

QC Batch ID:

Client Sample ID: MW-2 A&B Job Sample ID: 18061440.04

Volatile Organic Compounds

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

Sample Matrix Water

Date Collected 06/26/2018 13:33 Date Received 06/26/2018 15:36

Date Prepared

06/26/2018 16:00

Prep Method: Prepared By: Prep Batch ID Qb18062711 SW-846 5030C Jdongre

Jdongre PB18062706

Analytical Method: SW-846 8260C

**Analyst Initial** 

JKD

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
74-95-3	Dibromomethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-71-8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 21:11
100-41-4	Ethylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/26/18 21:11
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 21:11
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
103-65-1	n-Propylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
95-47-6	o-Xylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
100-42-5	Styrene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
98-06-6	t-butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
156-60-5	trans-1,2-Dichloroethy	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-69-4	Trichlorofluoromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
75-01-4	Vinyl Chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 21:11
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/26/18 21:11
17060-07-0	1,2-Dichloroethane-d4	114					70	130	%	1	06/26/18 21:11
1868-53-7	Dibromofluoromethan	112					70	130	%	1	06/26/18 21:11
2037-26-5	Toluene-d8(surr)	102					70	130	%	1	06/26/18 21:11
460-00-4	p-Bromofluorobenzen	128					70	130	%	1	06/26/18 21:11

n107



Client Sample ID: FB-2

A&B Job Sample ID: 18061440.05

Client Name:

Weston Solutions

Project Name: 01723.062.007.0002 / COH Brownfields Mckinney Phase II

Date: 7/31/2018

Attn: Dawn Denham

Test Description: Volatile Organic Compounds

Analytical Method: SW-846 8260C
QC Batch ID: Qb18062711
Prep Method: SW-846 5030C
Prepared By: Jdongre
Prep Batch ID PB18062706

Analyst Initial JKD

Sample Matrix Water

 Date Collected
 06/26/2018 14:20

 Date Received
 06/26/2018 15:36

 Date Prepared
 06/26/2018 16:00

.

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
630-20-6	1,1,1,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
71-55-6	1,1,1-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
79-34-5	1,1,2,2-Tetrachloroet	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
79-00-5	1,1,2-Trichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-34-3	1,1-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-35-4	1,1-Dichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
563-58-6	1,1-Dichloropropene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
87-61 <b>-</b> 6	1,2,3-trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
96-18-4	1,2,3-Trichloropropan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
120-82-1	1,2,4-Trichlorobenzen	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
95-63-6	1,2,4-Trimethylbenze	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
96-12-8	1,2-Dibromo-3-chloro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
106-93-4	1,2-Dibromoethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
95-50-1	1,2-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
107-06-2	1,2-Dichloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
78-87-5	1,2-Dichloropropane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
108-67-8	1,3,5-Trimethylbenze	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
541-73-1	1,3-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
142-28-9	1,3-Dichloropropane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
106-46-7	1,4-Dichlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
123-91-1	1,4-Dioxane	<0.08400	U	0.08400	0.32	0.084	0.32	1.6	mg/L	1	06/26/18 22:59
594-20-7	2,2-Dichloropropane	< 0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
95-49-8	2-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
106-43-4	4-Chlorotoluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
99-87-6	4-Isopropyltoluene	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 22:59
71-43-2	Benzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
108-86-1	Bromobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
74-97-5	Bromochloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-27-4	Bromodichloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-25-2	Bromoform	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
74-83-9	Bromomethane	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 22:59
75-15-0	Carbon disulfide	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
56-23-5	Carbon tetrachloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
108-90-7	Chlorobenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-00-3	Chloroethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
67-66-3	Chloroform	<0.00100	11	0.00100	0.000	0.001	0.005	0.05	mg/L	1	06/26/18 22:59

REVISED

Soil results reported on dry weight basis

MM 3/18



Client Sample ID: FB-2

A&B Job Sample ID: 18061440.05

Date: 7/31/2018

Client Name:

Weston Solutions

Attn: Dawn Denham

Project Name:

Test Description:

01723.062.007.0002 / COH Brownfields Mckinney Phase II

**Volatile Organic Compounds** 

Analytical Method: SW-846 8260C QC Batch ID: Qb18062711 Prep Method: SW-846 5030C Prepared By: Jdongre

Prep Batch ID PB18062706

Analyst Initial JKD Sample Matrix Water

Date Collected 06/26/2018 14:20 Date Received 06/26/2018 15:36 Date Prepared

06/26/2018 16:00

% Moisture

CAS Number	Parameter	Result	Flag	SDL	SQL	MDL	MQL	UQL	Units	DF	Date/Time
74-87-3	Chloromethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
156-59-2	cis-1,2-Dichloroethyle	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
10061-01-5	cis-1,3-Dichloroprope	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
124-48-1	Dibromochloromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
74-95-3	Dibromomethane	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-71-8	Dichlorodifluorometha	<0.00300	U	0.00300	0.005	0.003	0.005	0.05	mg/L	1	06/26/18 22:59
100-41-4	Ethylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
98-82-8	Isopropylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
108-38-3&106-4	m- & p-Xylenes	<0.00200	U	0.00200	0.01	0.002	0.01	0.1	mg/L	1	06/26/18 22:59
78-93-3	MEK	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-09-2	Methylene chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
91-20-3	Naphthalene	<0.00200	U	0.00200	0.005	0.002	0.005	0.05	mg/L	1	06/26/18 22:59
104-51-8	n-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
103-65-1	n-Propylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
95-47-6	o-Xylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
135-98-8	sec-Butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
100-42-5	Styrene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
98-06-6	t-butylbenzene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
127-18-4	Tetrachloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
108-88-3	Toluene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
156-60-5	trans-1,2-Dichloroethy	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
10061-02-6	trans-1,3-Dichloropro	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
79-01-6	Trichloroethylene	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-69-4	Trichlorofluoromethan	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
75-01-4	Vinyl Chloride	<0.00100	U	0.00100	0.005	0.001	0.005	0.05	mg/L	1	06/26/18 22:59
1330-20-7	Xylenes	<0.00200	U	0.00200	0.015	0.002	0.015	0.15	mg/L	1	06/26/18 22:59
17060-07-0	1,2-Dichloroethane-d4	114					70	130	%	1	06/26/18 22:59
1868-53-7	Dibromofluoromethan	117					70	130	%	1	06/26/18 22:59
2037-26-5	Toluene-d8(surr)	108					70	130	%	1	06/26/18 22:59
460-00-4	p-Bromofluorobenzen	123					70	130	%	1	06/26/18 22:59





**Job ID:** 18061440

Date:

7/31/2018

Analysis : Purgeable Aromatics Method : SW-846 8260C Reporting Units : mg/L

**Samples in This QC Batch:** 18061440.01,02,03,04,05

Sample Preparation: PB18062706 Prep Method: SW-846 5030C Prep Date: 06/26/18 16:00 Prep By: Jdongre

Parameter	CAS #	Result	Units	D.F.	MQL	MDL		Qual
1,1,1,2-Tetrachloroethane	630-20-6	< MDL	mg/L	1	0.005	0.001		
1,1,1-Trichloroethane	71-55-6	< MDL	mg/L	1	0.005	0.001		
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/L	1	0.005	0.001		
1,1,2-Trichloroethane	79-00-5	< MDL	mg/L	1	0.005	0.001		
1,1-Dichloroethane	75-34-3	< MDL	mg/L	1	0.005	0.001		
1,1-Dichloroethylene	75 <b>-</b> 35-4	< MDL	mg/L	1	0.005	0.001		
1,1-Dichloropropene	563-58-6	< MDL	mg/L	1	0.005	0.001		
1,2,3-trichlorobenzene	87-61-6	< MDL	mg/L	1	0.005	0.001		
1,2,3-Trichloropropane	96-18-4	< MDL	mg/L	1	0.005	0.001		
1,2,4-Trichlorobenzene	120-82-1	< MDL	mg/L	1	0.005	0.001		
1,2,4-Trimethylbenzene	95-63-6	< MDL	mg/L	1	0.005	0.001		
1,2-Dibromo-3-chloropropa	96-12-8	< MDL	mg/L	1	0.005	0.001		
1,2-Dibromoethane	106-93-4	< MDL	mg/L	1	0.005	0.001		
1,2-Dichlorobenzene	95-50-1	< MDL	mg/L	1	0.005	0.001		
1,2-Dichloroethane	107-06-2	< MDL	mg/L	1	0.005	0.001		
,2-Dichloropropane	78-87-5	< MDL	mg/L	1	0.005	0.001		
1,3,5-Trimethylbenzene	108-67-8	< MDL	mg/L	1	0.005	0.001		
1,3-Dichlorobenzene	541 <b>-</b> 73-1	< MDL	mg/L	1	0.005	0.001		
1,3-Dichloropropane	142-28-9	< MDL	mg/L	1	0.005	0.001		
1,4-Dichlorobenzene	106-46-7	< MDL	mg/L	1	0.005	0.001		
I,4-Dioxane	123-91-1	< MDL	mg/L	1	0.32	0.084		
2,2-Dichloropropane	594-20-7	< MDL	mg/L	1	0.005	0.001		
2-Chlorotoluene	95-49-8	< MDL	mg/L	1	0.005	0.001		
4-Chlorotoluene	106-43-4	< MDL	mg/L	1	0.005	0.001		
4-Isopropyltoluene	99-87-6	< MDL	mg/L	1	0.005	0.003		
Benzene	71-43-2	< MDL	mg/L	1	0.005	0.001		
Bromobenzene	108-86-1	< MDL	mg/L	1	0.005	0.001		
Bromochloromethane	74-97-5	< MDL	mg/L	1	0.005	0.001		
Bromodichloromethane	75-27-4	< MDL	mg/L	1	0.005	0.001		
Bromoform	75-25-2	< MDL	mg/L	1	0.005	0.001	-1	
Bromomethane	74-83-9	< MDL	mg/L	1	0.005	0.002		
Carbon disulfide	75-15-0	< MDL	mg/L	1	0.005	0.001		
Carbon tetrachloride	56-23-5	< MDL	mg/L	1	0.005	0.001	1	
Chlorobenzene	108-90-7	< MDL	mg/L	1	0.005	0.001		
Chloroethane	75-00-3	< MDL	mg/L	1	0.005	0.001	٠	
Chloroform	67-66-3	< MDL	mg/L	1				
Chloromethane	74-87-3	< MDL		1	0.005	0.001		
is-1,2-Dichloroethylene	156-59-2	< MDL	mg/L mg/L	1 1	0.005	0.001	- 4	

REVISED



**Job ID**: 18061440

Date:

7/31/2018

Analysis : Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/L

QC Batch ID : Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

QC Type: Method Blank		2.35,202				,	
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qua
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/L	1	0.005	0.001	1
Dibromochloromethane	124-48-1	< MDL	mg/L	1	0.005	0.001	
Dibromomethane	74-95-3	< MDL	mg/L	1	0.005	0.001	
Dichlorodifluoromethane	75-71-8	< MDL	mg/L	1	0.005	0.003	
Ethylbenzene	100-41-4	< MDL	mg/L	1	0.005	0.001	
Isopropylbenzene	98-82-8	< MDL	mg/L	1	0.005	0.001	
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/L	1	0.01	0.002	
MEK	78-93-3	< MDL	mg/L	1	0.005	0.001	
Methylene chloride	75-09-2	< MDL	mg/L	1	0.005	0.001	
Naphthalene	91-20-3	< MDL	mg/L	1	0.005	0.002	
n-Butylbenzene	104-51-8	< MDL	mg/L	1	0.005	0.001	
n-Propylbenzene	103-65-1	< MDL	mg/L	1	0.005	0.001	
o-Xylene	95-47-6	< MDL	mg/L	1	0.005	0.001	
sec-Butylbenzene	135-98-8	< MDL	mg/L	1	0.005	0.001	
Styrene	100-42-5	< MDL	mg/L	1	0.005	0.001	1.
t-butylbenzene	98-06-6	< MDL	mg/L	1	0.005	0.001	
Tetrachloroethylene	127-18-4	< MDL	mg/L	1	0.005	0.001	
Toluene	108-88-3	< MDL	mg/L	1	0.005	0.001	
trans-1,2-Dichloroethylene	156-60-5	< MDL	mg/L	1	0.005	0.001	
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/L	1	0.005	0.001	
Trichloroethylene	79-01-6	< MDL	mg/L	1	0.005	0.001	
Trichlorofluoromethane	75-69-4	< MDL	mg/L	1	0.005	0.001	
Vinyl Chloride	75-01-4	< MDL	mg/L	1	0.005	0.001	
Xylenes	1330-20-7	< MDL	mg/L	1	0.015	0.002	
Dibromofluoromethane(surr	1868-53-7	121	%	1			
1,2-Dichloroethane-d4(surr	17060-07-0	108	%	1			
Toluene-d8(surr)	2037-26-5	110	%	1			
p-Bromofluorobenzene(surr	460-00-4	115	%	1			

Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Out
1,1,1,2-Tetrachloroethane	0.02	0.0199	99.7	0.02	0.0199	99.5	0.2	20	78-120	Qual
1,1,1-Trichloroethane	0.02	0.0206	103	0.02	0.0198	98.9	4.1	20	74-126	
1,1,2,2-Tetrachloroethane	0.02	0.0204	102	0.02	0.0209	105	2.5	20	71-121	
1,1,2-Trichloroethane	0.02	0.0205	103	0.02	0.0199	99.6	3.2	20	80-120	
1,1-Dichloroethane	0.02	0.0202	101	0.02	0.0197	98.6	2.5	20	77-120	
1,1-Dichloroethylene	0.02	0.0202	101	0.02	0.0201	100	0.4	20	71-130	
1,1-Dichloropropene	0.02	0.0199	99.4	0.02	0.0194	97.1	2.4	20	79-125	

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**Job ID:** 18061440

Date:

7/31/2018

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units: mg/L

QC Batch ID : Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

QC Type: LCS and LCS										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
1,2,3-trichlorobenzene	0.02	0.0214	107	0.02	0.0226	113	5.6	20	69-121	
1,2,3-Trichloropropane	0.02	0.0200	100	0.02	0.0223	111	10.9	20	73-122	
1,2,4-Trichlorobenzene	0.02	0.0219	110	0.02	0.0219	109	0.0	20	69-130	
1,2,4-Trimethylbenzene	0.02	0.0198	98.9	0.02	0.0203	101	2.6	20	76-119	
1,2-Dibromo-3-chloropropa	0.02	0.0208	104	0.02	0.0222	111	6.4	20	62-135	
1,2-Dibromoethane	0.02	0.0220	110	0.02	0.0221	111	0.4	20	77-121	
1,2-Dichlorobenzene	0.02	0.0201	101	0.02	0.0213	107	5.8	20	80-113	
1,2-Dichloroethane	0.02	0.0214	107	0.02	0.0209	105	2.5	20	70-125	
1,2-Dichloropropane	0.02	0.0217	109	0.02	0.0210	105	3.5	20	78-122	
1,3,5-Trimethylbenzene	0.02	0.0193	96.5	0.02	0.0199	99.5	3.1	20	75-117	
1,3-Dichlorobenzene	0.02	0.0205	102	0.02	0.0216	108	5.4	20	80-115	
1,3-Dichloropropane	0.02	0.0207	104	0.02	0.0212	106	2.4	20	80-119	
1,4-Dichlorobenzene	0.02	0.0198	98.8	0.02	0.0211	105	6.6	20	79-118	
1,4-Dioxane	0.64	0.604	94.4	0.64	0.651	102	7.5	20	59-139	
2,2-Dichloropropane	0.02	0.0212	106	0.02	0.0214	107	1	20	65-135	
2-Chlorotoluene	0.02	0.0196	97.9	0.02	0.0203	102	3.6	20	79-118	
1-Chlorotoluene	0.02	0.0192	96.2	0.02	0.0203	101	5.4	20	78-118	
4-Isopropyltoluene	0.02	0.0194	97.1	0.02	0.0204	102	5	20	77-116	1.
Benzene	0.02	0.0208	104	0.02	0.0200	99.9	4	20	79-118	
Bromobenzene	0.02	0.0197	98.7	0.02	0.0207	103	4.7	20	80-116	
Bromochloromethane	0.02	0.0211	105	0.02	0.0205	102	2.7	20	78-123	
Bromodichloromethane	0.02	0.0209	104	0.02	0.0200	100	4.2	20	79-125	
Bromoform	0.02	0.0211	105	0.02	0.0200	99.8	5.3	20	71-130	
Bromomethane	0.02	0.0205	103	0.02	0.0188	93.9	8.8	20	62-141	
Carbon disulfide	0.02	0.0208	104	0.02	0.0198	99	4.7	20	70-125	
Carbon tetrachloride	0.02	0.0215	108	0.02	0.0204	102	5.3	20	72-132	
Chlorobenzene	0.02	0.0199	99.4	0.02	0.0195	97.5	1.9	20	82-116	
Chloroethane	0.02	0.0221	111	0.02	0.0201	101	9.5	20	60-138	
Chloroform	0.02	0.0208	104	0.02	0.0201	101	3.4	20	79-124	1
Chloromethane	0.02	0.0196	98.2	0.02	0.0197	98.4	0.3	20	61-139	
cis-1,2-Dichloroethylene	0.02	0.0206	103	0.02	0.0208	104	1	20	78-121	
cis-1,3-Dichloropropene	0.02	0.0205	102	0.02	0.0204	102	0.3	20	81-122	
Dibromochloromethane	0.02	0.0197	98.4	0.02	0.0207	104	5.1	20	77-120	
Dibromomethane	0.02	0.0213	106	0.02	0.0207	103	3.3	20	79-124	
Dichlorodifluoromethane	0.02	0.0213	94.6	0.02	0.0208	100		1		
Ethylbenzene	0.02	0.0200				84	11.9	20	51-135	
			99.8	0.02	0.0194	97.2	2.9	20	84-117	
sopropylbenzene	0.02	0.0199	99.5	0.02	0.0195	97.6	2	20	80-117	
m- & p-Xylenes	0.04	0.0404	101	0.04	0.0391	97.7	3.2	20	80-118	
MEK	0.02	0.0214	107	0.02	0.0225	112	5.1	20	60-136	
Methylene chloride	0.02	0.0205	102	0.02	0.0196	97.9	4.3	20	74-124	
Naphthalene	0.02	0.0239	119	0.02	0.0246	123	3	20	66-128	

REVISED



Job ID: 18061440

Date:

7/31/2018

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/L

**QC Batch ID**: Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

QC Type: LCS and LCS										
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
n-Butylbenzene	0.02	0.0210	105	0.02	0.0211	105	0.2	20	75-120	
n-Propylbenzene	0.02	0.0191	95.7	0.02	0.0203	102	5.9	20	78-120	
o-Xylene	0.02	0.0196	98.1	0.02	0.0198	99.1	1	20	84-117	
sec-Butylbenzene	0.02	0.0195	97.5	0.02	0.0202	101	3.6	20	77-120	
Styrene	0.02	0.0205	102	0.02	0.0192	95.8	6.5	20	85-120	
t-butylbenzene	0.02	0.0194	96.8	0.02	0.0202	101	4.3	20	78-120	
Tetrachloroethylene	0.02	0.0193	96.3	0.02	0.0199	99.3	3.3	20	78-129	
Toluene	0.02	0.0206	103	0.02	0.0201	100	2.4	20	84-117	
trans-1,2-Dichloroethylene	0.02	0.0198	98.8	0.02	0.0202	101	2.2	20	75-124	
trans-1,3-Dichloropropene	0.02	0.0199	99.7	0.02	0.0201	100	0.8	20	80-121	
Trichloroethylene	0.02	0.0197	98.6	0.02	0.0199	99.6	0.9	20	80-122	
Trichlorofluoromethane	0.02	0.0220	110	0.02	0.0205	102	7.2	20	57-141	
Vinyl Chloride	0.02	0.0210	105	0.02	0.0215	108	2.5	20	59-130	
Xylenes	0.06	0.06	100	0.06	0.0589	98.2	1.9	20	83-118	

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.0207	103	0.02	0.0194	97	6.5	35	72-139	
1,1,1-Trichloroethane	BRL	0.02	0.0198	99.1	0.02	0.0197	98.5	0.5	35	70.6-135	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.0242	121	0.02	0.0233	117	3.8	35	55-149	
1,1,2-Trichloroethane	BRL	0.02	0.0217	108	0.02	0.0211	106	2.8	35	68-139	
1,1-Dichloroethane	BRL	0.02	0.0189	94.4	0.02	0.0195	97.5	3.1	35	78-134	
1,1-Dichloroethylene	BRL	0.02	0.0200	99.9	0.02	0.0196	98	2	35	65-141	
1,1-Dichloropropene	BRL	0.02	0.0194	96.9	0.02	0.0193	96.5	0.5	35	79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.0200	99.8	0.02	0.0208	104	3.9	35	54-144	
1,2,3-Trichloropropane	BRL	0.02	0.0255	127	0.02	0.0240	120	6.1	35	58-156	
1,2,4-Trichlorobenzene	BRL	0.02	0.0186	93.2	0.02	0.0184	92	1.1	35	69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.0186	93	0.02	0.0185	92.5	0.5	35	80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.0256	128	0.02	0.0266	133	3.8	35	61-145	
1,2-Dibromoethane	BRL	0.02	0.0240	120	0.02	0.0225	113	6.4	35	68-140	
1,2-Dichlorobenzene	BRL	0.02	0.0201	101	0.02	0.0202	101	0.5	35	70-138	
1,2-Dichloroethane	BRL	0.02	0.0216	108	0.02	0.0211	106	2.3	35	67-152	
1,2-Dichloropropane	BRL	0.02	0.0197	98.6	0.02	0.0202	101	2.5	35	79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.0184	92.1	0.02	0.0184	92	0	35	79-133	
1,3-Dichlorobenzene	BRL	0.02	0.0192	95.8	0.02	0.0193	96.5	0.5	35	79-128	
1,3-Dichloropropane	BRL	0.02	0.0215	108	0.02	0.0218	109	1.4	35	70-147	
1,4-Dichlorobenzene	BRL	0.02	0.0190	95.2	0.02	0.0193	96.5	1.6	35	76-127	
1,4-Dioxane	BRL	0.64	0.856	134	0.64	0.815	127	4.9	35	70-125	М8

REVISED



**Job ID**: 18061440

Date:

7/31/2018

Analysis : Purgeable Aromatics

Method:

SW-846 8260C

Reporting Units : mg/L

**QC Batch ID**: Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	20.00
Parameter	Result	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qua
2,2-Dichloropropane	BRL	0.02	0.0186	92.8	0.02	0.0188	94	1.1	35	60-129	
2-Chlorotoluene	BRL	0.02	0.0185	92.4	0.02	0.0190	95	2.7	35	83-130	
4-Chlorotoluene	BRL	0.02	0.0184	91.9	0.02	0.0187	93.5	1.6	35	82-129	
4-Isopropyltoluene	BRL	0.02	0.0183	91.7	0.02	0.0184	92	0.5	35	78-129	
Benzene	BRL	0.02	0.0187	93.3	0.02	0.0188	94	0.5	35	73-129	
Bromobenzene	BRL	0.02	0.0201	100	0.02	0.0202	101	0.5	35	76-132	
Bromochloromethane	BRL	0.02	0.0216	108	0.02	0.0206	103	4.7	35	76-135	
Bromodichloromethane	BRL	0.02	0.0194	97.2	0.02	0.0188	94	3.1	35	80-136	
Bromoform	BRL	0.02	0.0232	116	0.02	0.0234	117	0.9	35	65-139	
Bromomethane	BRL	0.02	0.0179	89.6	0.02	0.0172	86	4	35	65-150	
Carbon disulfide	BRL	0.02	0.0187	93.3	0.02	0.0183	91.5	2.2	35	70-125	
Carbon tetrachloride	BRL	0.02	0.0186	93	0.02	0.0183	91.5	1.6	35	70-136	
Chlorobenzene	BRL	0.02	0.0191	95.6	0.02	0.0187	93.5	2.1	35	69-123	
Chloroethane	BRL	0.02	0.0173	86.3	0.02	0.0204	102	16.4	35	74-145	
Chloroform	BRL	0.02	0.0199	99.5	0.02	0.0199	99.5	0	35	41.8-164	
Chloromethane	BRL	0.02	0.0174	86.8	0.02	0.0188	94	7.7	35	42.2-160	1
cis-1,2-Dichloroethylene	BRL	0.02	0.0197	98.6	0.02	0.0203	102	3	35	71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.0183	91.4	0.02	0.0170	85	7.4	35	74-128	
Dibromochloromethane	BRL	0.02	0.0213	106	0.02	0.0214	107	0.5	35	67-141	
Dibromomethane	BRL	0.02	0.0223	111	0.02	0.0218	109	2.3	35	63.1-135	
Dichlorodifluoromethane	BRL	0.02	0.0172	86.1	0.02	0.0193	96.5	11.5	35	62-146	
Ethylbenzene	BRL	0.02	0.0194	96.8	0.02	0.0193	96.5	0.5	35	80-132	
Isopropylbenzene	BRL	0.02	0.0185	92.6	0.02	0.0187	93.5	1.1	35	78-137	1
m- & p-Xylenes	BRL	0.04	0.0381	95.4	0.04	0.0374	93.5	1.8	35	74-127	
MEK	BRL	0.02	0.0209	104	0.02	0.0238	119	13	35	52-148	
Methylene chloride	BRL	0.02	0.0203	102	0.02	0.0195	97.5	4	35	68-131	
Naphthalene	BRL	0.02	0.0230	115	0.02	0.0230	115	0	35	61-116	
n-Butylbenzene	BRL	0.02	0.0184	92	0.02	0.0189	94.5	2.7	35	73-140	
n-Propylbenzene	BRL	0.02	0.0179	89.3	0.02	0.0187	93.5	4.4	35	75-127	
o-Xylene	BRL	0.02	0.0189	94.6	0.02	0.0189	94.5	0	35	74-126	
sec-Butylbenzene	BRL	0.02	0.0189	90.2	0.02	0.0184	92	2.2	35	75-129	
	BRL	0.02	0.0180	99	0.02	0.0199	99.5	0.5	35	77-123	
Styrene									1		
t-butylbenzene	BRL	0.02	0.0184	92	0.02	0.0188	94	2.2	35	75-126	
Tetrachloroethylene	BRL	0.02	0.0193	96.3	0.02	0.0185	92.5	4.2	35	27.6-194	
Toluene	BRL	0.02	0.0195	97.5	0.02	0.0197	98.5	1	35	72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.0204	102	0.02	0.0196	98	4	35	73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.0200	100	0.02	0.0193	96.5	3.6	35	66-131	
Trichloroethylene	BRL	0.02	0.0184	92.2	0.02	0.0177	88.5	3.9	35	6-138	
Trichlorofluoromethane	BRL	0.02	0.0216	108	0.02	0.0210	105	2.8	35	67-148	
Vinyl Chloride	BRL	0.02	0.0218	109	0.02	0.0218	109	0	35	59.4-140	

REVISED



**Job ID:** 18061440

Date:

7/31/2018

73-127

Analysis: Purgeable Aromatics

Method:

SW-846 8260C

93.8

1.2

Reporting Units: mg/L

**QC Batch ID**: Qb18062711

Xylenes

BRL

**Created Date:** 06/26/18

0.057

Created By: Jdongre

**Samples in This QC Batch**: 18061440.01,02,03,04,05

0.06

QC Type: MS and MSD QC Sample ID: 18061440.04 MS MSD MSD RPD %Rec Sample MS MS MSD CtrlLimit Parameter Result Spk Added % Rec Spk Added Result % Rec RPD CtrlLimit Qual Result

0.06

0.0563

95 06/26/18 16:00 Prep By: **Sample Preparation:** PB18062706 Prep Method: SW-846 5030C Prep Date : Jdongre

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qı
1,1,1,2-Tetrachloroethane	630-20-6	< MDL	mg/L	1	0.005	0.001	
1,1,1-Trichloroethane	71-55-6	< MDL	mg/L	1	0.005	0.001	
1,1,2,2-Tetrachloroethane	79-34-5	< MDL	mg/L	1	0.005	0.001	
1,1,2-Trichloroethane	79-00-5	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloroethane	75-34-3	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloroethylene	75-35-4	< MDL	mg/L	1	0.005	0.001	
1,1-Dichloropropene	563-58-6	< MDL	mg/L	1	0.005	0.001	
1,2,3-trichlorobenzene	87-61-6	< MDL	mg/L	1	0.005	0.001	
1,2,3-Trichloropropane	96-18-4	< MDL	mg/L	1	0.005	0.001	
1,2,4-Trichlorobenzene	120-82-1	< MDL	mg/L	1	0.005	0.001	
1,2,4-Trimethylbenzene	95-63-6	< MDL	mg/L	1	0.005	0.001	
1,2-Dibromo-3-chloropropa	96-12-8	< MDL	mg/L	1	0.005	0.001	
1,2-Dibromoethane	106-93-4	< MDL	mg/L	1	0.005	0.001	
1,2-Dichlorobenzene	95-50-1	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloroethane	107-06-2	< MDL	mg/L	1	0.005	0.001	
1,2-Dichloropropane	78-87-5	< MDL	mg/L	1	0.005	0.001	
1,3,5-Trimethylbenzene	108-67-8	< MDL	mg/L	1	0.005	0.001	
1,3-Dichlorobenzene	541-73-1	< MDL	mg/L	1	0.005	0.001	
1,3-Dichloropropane	142-28-9	< MDL	mg/L	1	0.005	0.001	
1,4-Dichlorobenzene	106-46-7	< MDL	mg/L	1	0.005	0.001	
1,4-Dioxane	123-91-1	< MDL	mg/L	1	0.32	0.084	
2,2-Dichloropropane	594-20-7	< MDL	mg/L	1	0.005	0.001	
2-Chlorotoluene	95 <del>-4</del> 9-8	< MDL	mg/L	1	0.005	0.001	
4-Chlorotoluene	106-43-4	< MDL	mg/L	1	0.005	0.001	
4-Isopropyltoluene	99-87-6	< MDL	mg/L	1	0.005	0.003	
Benzene	71-43-2	< MDL	mg/L	1	0.005	0.001	
Bromobenzene	108-86-1	< MDL	mg/L	1	0.005	0.001	
Bromochloromethane	74-97-5	< MDL	mg/L	1	0.005	0.001	
Bromodichloromethane	75-27-4	< MDL	mg/L	1	0.005	0.001	
Bromoform	75-25-2	< MDL	mg/L	1	0.005	0.001	
Bromomethane	74-83-9	< MDL	mg/L	1	0.005	0.002	



**Job ID:** 18061440

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

QC Batch ID : Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch: 18061440.01,02,03,04,05

Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Carbon disulfide	75-15-0	< MDL	mg/L	. 1	0.005	0.001	
Carbon tetrachloride	56-23-5	< MDL	mg/L	1	0.005	0.001	
Chlorobenzene	108-90-7	< MDL	mg/L	1	0.005	0.001	
Chloroethane	75-00-3	< MDL	mg/L	1	0.005	0.001	
Chloroform	67-66-3	< MDL	mg/L	1	0.005	0.001	
Chloromethane	74-87-3	< MDL	mg/L	1	0.005	0.001	
cis-1,2-Dichloroethylene	156-59-2	< MDL	mg/L	1	0.005	0.001	
cis-1,3-Dichloropropene	10061-01-5	< MDL	mg/L	1	0.005	0.001	
Dibromochloromethane	124-48-1	< MDL	mg/L	1	0.005	0.001	
Dibromomethane	74-95-3	< MDL	mg/L	1	0.005	0.001	
Dichlorodifluoromethane	75-71-8	< MDL	mg/L	1	0.005	0.003	
Ethylbenzene	100-41-4	< MDL	mg/L	1	0.005	0.001	
Isopropylbenzene	98-82-8	< MDL	mg/L	1	0.005	0.001	
m- & p-Xylenes	108-38-3&106-42-3	< MDL	mg/L	1	0.01	0.002	
MEK	78-93-3	< MDL	mg/L	1	0.005	0.001	
Methylene chloride	75-09-2	< MDL	mg/L	1	0.005	0.001	
Naphthalene	91-20-3	< MDL	mg/L	1	0.005	0.002	
n-Butylbenzene	104-51-8	< MDL	mg/L	1	0.005	0.001	
n-Propylbenzene	103-65-1	< MDL	mg/L	1	0.005	0.001	
o-Xylene	95-47-6	< MDL	mg/L	1	0.005	0.001	
sec-Butylbenzene	135-98-8	< MDL	mg/L	1	0.005	0.001	
Styrene	100-42-5	< MDL	mg/L	1	0.005	0.001	
t-butylbenzene	98-06-6	< MDL	mg/L	1	0.005	0.001	
Tetrachloroethylene	127-18-4	< MDL	mg/L	1	0.005	0.001	
Toluene	108-88-3	< MDL	mg/L	1	0.005	0.001	
trans-1,2-Dichloroethylene	156-60-5	< MDL	mg/L	1	0.005	0.001	
trans-1,3-Dichloropropene	10061-02-6	< MDL	mg/L	1	0.005	0.001	
Trichloroethylene	79-01-6	< MDL	mg/L	1	0.005	0.001	
Trichlorofluoromethane	75-69-4	< MDL	mg/L	1	0.005	0.001	
Vinyl Chloride	75-01-4	< MDL	mg/L	1	0.005	0.001	
Xylenes	1330-20-7	< MDL	mg/L	1	0.015	0.002	
Dibromofluoromethane(surr	1868-53-7	121	%	1	5.525	0.002	
1,2-Dichloroethane-d4(surr	17060-07-0	108	%	1			
Toluene-d8(surr)	2037-26-5	110	%	1			
p-Bromofluorobenzene(surr	460-00-4	115	-%	1			

QC Type:	LCS and LCSI	)									Sea de
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual

Page 32 of 62



**Job ID**: 18061440

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

Created By: Jdongre

**Samples in This QC Batch:** 18061440.01,02,03,04,05

Davous droe	LCS	LCS	LCS	LCSD	LCSD	LCSD	DDD	RPD	%Recovery	0
Parameter 1,1,1,2-Tetrachloroethane	Spk Added 0.02	Result 0.0199	% Rec 99.7	Spk Added 0.02	Result 0.0199	% Rec 99.5	RPD 0.2	CtrlLimit 20	CtrlLimit 78-120	Qua
1,1,1-Trichloroethane	0.02	0.0206	103	0.02	0.0198	98.9	4.1	20	74-126	
1,1,2,2-Tetrachloroethane	0.02	0.0204	103	0.02	0.0198	105	2.5	20	71-121	
1,1,2-Trichloroethane	0.02	0.0204	102	0.02	0.0209	99.6	3.2	20	80-120	
1,1-Dichloroethane	0.02	0.0203	101	0.02	0.0197	98.6	2.5	20	77-120	
I,1-Dichloroethylene	0.02	0.0202	101	0.02	0.0197	100	0.4	20	71-130	
1,1-Dichloropropene	0.02	0.0202	99.4	0.02	0.0201	97.1	2.4	20	79-125	
1,2,3-trichlorobenzene	0.02	0.0199	107	0.02	0.0194	113	5.6	20	69-121	
1,2,3-trichloropropane	0.02	0.0214	100	0.02	0.0228	111	10.9	20	73-122	0
1,2,4-Trichlorobenzene	0.02	0.0200	110	0.02	0.0223	109	0.0	20	69-130	
1,2,4-Trimethylbenzene	0.02	0.0219	98.9	0.02	0.0219	109	2.6	20	76-119	
•	0.02	0.0208	1				6.4			
1,2-Dibromo-3-chloropropa 1,2-Dibromoethane	0.02	0.0208	104	0.02	0.0222	111		20	62-135 77-121	
1,2-Dichlorobenzene	0.02	0.0220	110 101	0.02 0.02	0.0221	111 107	0.4 5.8	20 20	80-113	
1,2-Dichloroethane	0.02	0.0201	107		0.0213		2.5	20		
	1		1	0.02		105			70-125	
1,2-Dichloropropane 1,3,5-Trimethylbenzene	0.02	0.0217	109	0.02	0.0210	105	3.5 3.1	20	78-122	
	0.02	0.0193	96.5	0.02	0.0199	99.5		20	75-117	
I,3-Dichlorobenzene	0.02	0.0205	102	0.02	0.0216	108	5.4	20	80-115	
I,3-Dichloropropane	0.02	0.0207	104	0.02	0.0212	106	2.4	20	80-119	
I,4-Dichlorobenzene	0.02	0.0198	98.8	0.02	0.0211	105	6.6	20	79-118	
1,4-Dioxane	0.64	0.604	94.4	0.64	0.651	102	7.5	20	59-139	
2,2-Dichloropropane	0.02	0.0212	106	0.02	0.0214	107	1	20	65-135	
2-Chlorotoluene	0.02	0.0196	97.9	0.02	0.0203	102	3.6	20	79-118	
1-Chlorotoluene	0.02	0.0192	96.2	0.02	0.0203	101	5.4	20	78-118	
4-Isopropyltoluene	0.02	0.0194	97.1	0.02	0.0204	102	5	20	77-116	
Benzene	0.02	0.0208	104	0.02	0.0200	99.9	4	20	79-118	
Bromobenzene	0.02	0.0197	98.7	0.02	0.0207	103	4.7	20	80-116	
Bromochloromethane	0.02	0.0211	105	0.02	0.0205	102	2.7	20	78-123	
Bromodichloromethane	0.02	0.0209	104	0.02	0.0200	100	4.2	20	79-125	
Bromoform	0.02	0.0211	105	0.02	0.0200	99.8	5.3	20	71-130	
Bromomethane	0.02	0.0205	103	0.02	0.0188	93.9	8.8	20	62-141	
Carbon disulfide	0.02	0.0208	104	0.02	0.0198	99	4.7	20	70-125	
Carbon tetrachloride	0.02	0.0215	108	0.02	0.0204	102	5.3	20	72-132	
Chlorobenzene	0.02	0.0199	99.4	0.02	0.0195	97.5	1.9	20	82-116	
Chloroethane	0.02	0.0221	111	0.02	0.0201	101	9.5	20	60-138	
Chloroform	0.02	0.0208	104	0.02	0.0201	101	3.4	20	79-124	
Chloromethane	0.02	0.0196	98.2	0.02	0.0197	98.4	0.3	20	61-139	
cis-1,2-Dichloroethylene	0.02	0.0206	103	0.02	0.0208	104	1	20	78-121	
cis-1,3-Dichloropropene	0.02	0.0205	102	0.02	0.0204	102	0.3	20	81-122	
Dibromochloromethane	0.02	0.0197	98.4	0.02	0.0207	104	5.1	20	77-120	
Dibromomethane	0.02	0.0213	106	0.02	0.0206	103	3.3	20	79-124	

REVISED



**Job ID:** 18061440

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units: mg/L

QC Batch ID: Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

QC Type: LCS and LCS		LCS	LCS	LCSD	LCSD	LCSD		RPD	0/ Doggven	
Parameter	LCS Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	%Recovery CtrlLimit	Qual
Dichlorodifluoromethane	0.02	0.0189	94.6	0.02	0.0168	84	11.9	20	51-135	
Ethylbenzene	0.02	0.0200	99.8	0.02	0.0194	97.2	2.9	20	84-117	
Isopropylbenzene	0.02	0.0199	99.5	0.02	0.0195	97.6	2	20	. 80-117	
m- & p-Xylenes	0.04	0.0404	101	0.04	0.0391	97.7	3.2	20	80-118	
MEK	0.02	0.0214	107	0.02	0.0225	112	5.1	20	60-136	1
Methylene chloride	0.02	0.0205	102	0.02	0.0196	97.9	4.3	20	74-124	
Naphthalene	0.02	0.0239	119	0.02	0.0246	123	3	20	66-128	
n-Butylbenzene	0.02	0.0210	105	0.02	0.0211	105	0.2	20	75-120	
n-Propylbenzene	0.02	0.0191	95.7	0.02	0.0203	102	5.9	20	78-120	
o-Xylene	0.02	0.0196	98.1	0.02	0.0198	99.1	1	20	84-117	
sec-Butylbenzene	0.02	0.0195	97.5	0.02	0.0202	101	3.6	20	77-120	
Styrene	0.02	0.0205	102	0.02	0.0192	95.8	6.5	20	85-120	
t-butylbenzene	0.02	0.0194	96.8	0.02	0.0202	101	4.3	20	78-120	
Tetrachloroethylene	0.02	0.0193	96.3	0.02	0.0199	99.3	3.3	20	78-129	
Toluene	0.02	0.0206	103	0.02	0.0201	100	2.4	20	84-117	
trans-1,2-Dichloroethylene	0.02	0.0198	98.8	0.02	0.0202	101	2.2	20	75-124	
trans-1,3-Dichloropropene	0.02	0.0199	99.7	0.02	0.0201	100	0.8	20	80-121	
Trichloroethylene	0.02	0.0197	98.6	0.02	0.0199	99.6	0.9	20	80-122	
Trichlorofluoromethane	0.02	0.0220	110	0.02	0.0205	102	7.2	20	57-141	
Vinyl Chloride	0.02	0.0210	105	0.02	0.0215	108	2.5	20	59-130	
Xylenes	0.06	0.06	100	0.06	0.0589	98.2	1.9	20	83-118	

QC Sample ID: 180614	140.04										
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
1,1,1,2-Tetrachloroethane	BRL	0.02	0.0207	103	0.02	0.0194	97	6.5	35	72-139	
1,1,1-Trichloroethane	BRL.	0.02	0.0198	99.1	0.02	0.0197	98.5	0.5	35	70.6-135	
1,1,2,2-Tetrachloroethane	BRL	0.02	0.0242	121	0.02	0.0233	117	3.8	35	55-149	
1,1,2-Trichloroethane	BRL	0.02	0.0217	108	0.02	0.0211	106	2.8	35	68-139	
1,1-Dichloroethane	BRL.	0.02	0.0189	94.4	0.02	0.0195	97.5	3.1	35	78-134	
1,1-Dichloroethylene	BRL.	0.02	0.0200	99.9	0.02	0.0196	98	2	35	65-141	
1,1-Dichloropropene	BRL	0.02	0.0194	96.9	0.02	0.0193	96.5	0.5	35	79-136	
1,2,3-trichlorobenzene	BRL	0.02	0.0200	99.8	0.02	0.0208	104	3.9	35	54-144	
1,2,3-Trichloropropane	BRL	0.02	0.0255	127	0.02	0.0240	120	6.1	35	58-156	
1,2,4-Trichlorobenzene	BRL.	0.02	0.0186	93.2	0.02	0.0184	92	1.1	35	69-127	
1,2,4-Trimethylbenzene	BRL	0.02	0.0186	93	0.02	0.0185	92.5	0.5	35	80-131	
1,2-Dibromo-3-chloropropa	BRL	0.02	0.0256	128	0.02	0.0266	133	3.8	35	61-145	
1,2-Dibromoethane	BRL	0.02	0.0240	120	0.02	0.0225	113	6.4	35	68-140	
1,2-Dichlorobenzene	BRL	0.02	0.0201	101	0.02	0.0202	101	0.5	35	70-138	

REVISED



**Job ID:** 18061440

Date:

7/31/2018

Analysis: Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

hat a second	Sample	MS	MS	MS	MSD	MSD	MSD		RPD	%Rec	
Parameter		Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qua
1,2-Dichloroethane	BRL	0.02	0.0216	108	0.02	0.0211	106	2.3	35	67-152	
1,2-Dichloropropane	BRL	0.02	0.0197	98.6	0.02	0.0202	101	2.5	35	79-135	
1,3,5-Trimethylbenzene	BRL	0.02	0.0184	92.1	0.02	0.0184	92	0	35	79-133	
1,3-Dichlorobenzene	BRL	0.02	0.0192	95.8	0.02	0.0193	96.5	0.5	35	79-128	
1,3-Dichloropropane	BRL	0.02	0.0215	108	0.02	0.0218	109	1.4	35	70-147	
1,4-Dichlorobenzene	BRL	0.02	0.0190	95.2	0.02	0.0193	96.5	1.6	35	76-127	
1,4-Dioxane	BRL	0.64	0.856	134	0.64	0.815	127	4.9	35	70-125	M8
2,2-Dichloropropane	BRL	0.02	0.0186	92.8	0.02	0.0188	94	1.1	35	60-129	
2-Chlorotoluene	BRL	0.02	0.0185	92.4	0.02	0.0190	95	2.7	35	83-130	
4-Chlorotoluene	BRL	0.02	0.0184	91.9	0.02	0.0187	93.5	1.6	35	82-129	
4-Isopropyltoluene	BRL	0.02	0.0183	91.7	0.02	0.0184	92	0.5	35	78-129	
Benzene	BRL	0.02	0.0187	93.3	0.02	0.0188	94	0.5	35	73-129	
Bromobenzene	BRL	0.02	0.0201	100	0.02	0.0202	101	0.5	35	76-132	
Bromochloromethane	BRL	0.02	0.0216	108	0.02	0.0206	103	4.7	35	76-135	
Bromodichloromethane	BRL	0.02	0.0194	97.2	0.02	0.0188	94	3.1	35	80-136	
Bromoform	BRL	0.02	0.0232	116	0.02	0.0234	117	0.9	35	65-139	
Bromomethane	BRL	0.02	0.0179	89.6	0.02	0.0172	86	4	35	65-150	
Carbon disulfide	BRL	0.02	0.0187	93.3	0.02	0.0183	91.5	2.2	35	70-125	
Carbon tetrachloride	BRL	0.02	0.0186	93	0.02	0.0183	91.5	1.6	35	70-136	
Chlorobenzene	BRL	0.02	0.0191	95.6	0.02	0.0187	93.5	2.1	35	69-123	
Chloroethane	BRL	0.02	0.0173	86.3	0.02	0.0204	102	16.4	35	74-145	
Chloroform	BRL	0.02	0.0199	99.5	0.02	0.0199	99.5	0	35	41.8-164	
Chloromethane	BRL	0.02	0.0174	86.8	0.02	0.0188	94	7.7	35	42.2-160	
cis-1,2-Dichloroethylene	BRL	0.02	0.0197	98.6	0.02	0.0203	102	3	35	71-134	
cis-1,3-Dichloropropene	BRL	0.02	0.0183	91.4	0.02	0.0170	85	7.4	35	74-128	
Dibromochloromethane	BRL	0.02	0.0213	106	0.02	0.0214	107	0.5	35	67-141	
Dibromomethane	BRL	0.02	0.0223	111	0.02	0.0218	109	2,3	35	63.1-135	
Dichlorodifluoromethane	BRL	0.02	0.0172	86.1	0.02	0.0193	96.5	11.5	35	62-146	
Ethylbenzene	BRL	0.02	0.0194	96.8	0.02	0.0193	96.5	0.5	35	80-132	ļ.
Isopropylbenzene	BRL	0.02	0.0185	92.6	0.02	0.0187	93.5	1.1	35	78-137	
m- & p-Xylenes	BRL	0.04	0.0381	95.4	0.04	0.0374	93.5	1.8	35	74-127	
MEK	BRL	0.02	0.0209	104	0.02	0.0238	119	13	35	52-148	
Methylene chloride	BRL	0.02	0.0203	102	0.02	0.0195	97.5	4	35	68-131	
Naphthalene	BRL	0.02	0.0230	115	0.02	0.0230	115	0	35	61-116	
n-Butylbenzene	BRL	0.02	0.0184	92	0.02	0.0189	94.5	2.7	35	73-140	
n-Propylbenzene	BRL	0.02	0.0179	89.3	0.02	0.0187	93.5	4.4	35	75-127	
o-Xylene	BRL	0.02	0.0189	94.6	0.02	0.0189	94.5	0	35	74-126	
sec-Butylbenzene	BRL	0.02	0.0180	90.2	0.02	0.0184	92	2.2	35	75-129	
Styrene	BRL	0.02	0.0198	99	0.02	0.0199	99.5	0.5	35	77-123	
t-butylbenzene	BRL	0.02	0.0184	92	0.02	0.0188	94	2.2	35	75-126	

REVISED



**Job ID**: 18061440

Date:

7/31/2018

Analysis : Volatile Organic Compounds

Method:

SW-846 8260C

Reporting Units : mg/L

QC Batch ID: Qb18062711

Created Date: 06/26/18

Created By: Jdongre

Samples in This QC Batch : 18061440.01,02,03,04,05

QC Type: MS and MSD QC Sample ID: 180614	40.04										
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Tetrachloroethylene	BRL	0.02	0.0193	96.3	0.02	0.0185	92.5	4,2	35	27.6-194	
Toluene	BRL	0.02	0.0195	97.5	0.02	0.0197	98.5	1	35	72-121	
trans-1,2-Dichloroethylene	BRL	0.02	0.0204	102	0.02	0.0196	98	4	35	73-138	
trans-1,3-Dichloropropene	BRL	0.02	0.0200	100	0.02	0.0193	96.5	3.6	35	66-131	
Trichloroethylene	BRL	0.02	0.0184	92.2	0.02	0.0177	88.5	3.9	35	6-138	1
Trichlorofluoromethane	BRL	0.02	0.0216	108	0.02	0.0210	105	2.8	35	67-148	
Vinyl Chloride	BRL	0.02	0.0218	109	0.02	0.0218	109	0	35	59.4-140	
Xylenes	BRL	0.06	0.057	95	0.06	0.0563	93.8	1.2	35	73-127	



**Job ID:** 18061440

Date:

7/31/2018

Analysis : Hexavalent Chromium

Method:

SM 3500Cr B

Reporting Units : mg/L

**QC Batch ID**: Qb18062750

Created Date: 06/27/18

Created By: Ajohn

Samples in This QC Batch : 18061440.02,03,04

QC Type: Method Blank							
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Chromium, Hexavalent		< MDL	mg/L	1	0.01	0.002	

QC Type:	LCS and LCS	D									
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Chromium, I	Hexavalent	0.1	0.105	105	0.1	0.103	103	1.9	20	88.1-116	

QC Type: MS and MSI QC Sample ID: 1806											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Oual
Chromium, Hexavalent	BRL	0.1	0.099	99	0.1	0.099	99	0	20	80-120	Qua



Job ID: 18061440

Date:

7/31/2018

Analysis: Total Petroleum Hydrocarbons

Method:

TX 1005

Reporting Units : mg/L

QC Batch ID: Qb18062807

Created Date: 06/27/18

Created By: MKulkarni

Samples in This QC Batch: 18061440.02

Sample Preparation: PB18062806

Prep Method: TX 1005

Prep Date: 06/27/18 11:30 Prep By:

MKulkarni

Parameter	CAS#	Result	Units	D.F.	MQL	MDL	Qua
C6-C12	TPH-1005-1	< MDL	mg/L	1	1.5	0.66	
>C12-C28	TPH-1005-2	< MDL	mg/L	1	1.5	0.86	İ
>C28-C35	TPH-1005-4	< MDL	mg/L	1	1.5	0.75	
Total C6-C35		< MDL	mg/L	1		0.86	- 1
1-Chlorooctane(surr)	111-85-3	81.7	%	1			
Chlorooctadecane(surr)	3386-33-2	79.7	%	1			

QC Type: Duplicate						111
QC Sample ID: 18061	480.01					
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
>C12-C28	BRL	BRL	mg/L	0	30	
>C28-C35	BRL	BRL	mg/L	0	30	
C6-C12	BRL	BRL	mg/L	0	30	
Total C6-C35	BRL	BRL	mg/L	0	30	

QC Type:	LCS and LCS	D									
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
C6-C12		30	34.9	116	30	34.6	115	0.9	20	75-125	
>C12-C28		30	33.5	112	30	36.0	120	7.2	20	75-125	
>C28-C35		30	31.6	105	30	32.0	107	1,3	20	75-125	



**Job ID:** 18061440

Date:

7/31/2018

Analysis : Semivolatile Organic Compounds

Method:

SW-846 8270D

Reporting Units : mg/L

QC Batch ID: Qb18062919

Created Date: 06/29/18

Created By: VNair

Samples in This QC Batch : 18061440.02

Extraction:

PB18062835

Prep Method: SW-846 3510C

Prep Date: 06/28/18 09:30 Prep By:

MMuteen

QC Type: Method Blank						The same states	31.
Parameter	CAS#	Result	Units	D.F.	MQL	MDL	Qual
Acenaphthene	83-32-9	< MDL	mg/L	1	0.01	0.005	
Acenaphthylene	208-96-8	< MDL	mg/L	1	0.01	0.004	
Anthracene	120-12-7	< MDL	mg/L	1	0.01	0.005	
Benzo(a)anthracene	56-55-3	< MDL	mg/L	1	0.01	0.004	
Benzo(a)pyrene	50-32-8	< MDL	mg/L	1	0.01	0.004	
Benzo(b)fluoranthene	205-99-2	< MDL	mg/L	1	0.01	0.004	
Benzo(g,h,i)perylene	191-24-2	< MDL	mg/L	1	0.01	0.005	
Benzo(k)fluoranthene	207-08-9	< MDL	mg/L	1	0.01	0.003	
Chrysene	218-01-9	< MDL	mg/L	1	0.01	0.002	
Dibenzo(a,h)anthracene	53-70-3	< MDL	mg/L	1	0.01	0.005	1
Dibenzofuran	132-64-9	< MDL	mg/L	1	0.01	0.003	
Fluoranthene	206-44-0	< MDL	mg/L	1	0.01	0.004	
Fluorene	86-73-7	< MDL	mg/L	1	0.01	0.006	
Indeno(1,2,3-cd)pyrene	193-39-5	< MDL	mg/L	1	0.01	0.005	
Naphthalene	91-20-3	< MDL	mg/L	1	0.01	0.004	
Phenanthrene	85-01-8	< MDL	mg/L	1	0.01	0.003	
Pyrene	129-00-0	< MDL	mg/L	1	0.01	0.006	
2-Fluorophenol(surr)	367-12-4	47.6	%	1			
Phenol-d6(surr)	13127-88-3	29.4	%	1			
Nitrobenzene-d5(surr)	4165-60-0	64.4	%	1			
2-Fluorobiphenyl(surr)	132-60-8	75.1	%	1			
2,4,6-Tribromophenol(surr)	118-79-6	83.5	%	1			
p-Terphenyl-d14(surr)	1718-51-0	92.3	%	1			

QC Type: LCS and LCS	טי									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Acenaphthene	0.05	0.0400	80	0.05	0.0408	81.5	2	35	47-105	
Acenaphthylene	0.05	0.0362	72.4	0.05	0.0378	75.6	4.3	35	41-108	
Anthracene	0.05	0.0429	85.7	0.05	0.0432	86.3	0.8	35	<b>57-11</b> 2	
Benzo(a)anthracene	0.05	0.0424	84.8	0.05	0.0439	87.7	3.5	35	58-115	
Benzo(a)pyrene	0.05	0.0409	81.9	0.05	0.0422	84.4	3	35	54-110	
Benzo(b)fluoranthene	0.05	0.0434	86.8	0.05	0.0435	86.9	0.2	35	53-117	
Benzo(g,h,i)perylene	0.05	0.0434	86.8	0.05	0.0440	88	1.4	35	50-110	
Benzo(k)fluoranthene	0.05	0.0401	80.3	0.05	0.0445	89	10.3	35	57-110	
Chrysene	0.05	0.0426	85.3	0.05	0.0431	86.3	1.1	35	59-110	
Dibenzo(a,h)anthracene	0.05	0.0445	89.1	0.05	0.0438	87.6	1.7	35	51-115	

REVISED



**Job ID**: 18061440

Date:

7/31/2018

Analysis : Semivolatile Organic Compounds

Method:

SW-846 8270D

Reporting Units : mg/L

QC Batch ID: Qb18062919

Created Date: 06/29/18

Created By: VNair

Samples in This QC Batch: 18061440.02

	LCS	LCS	LCS	LCSD	LCSD	LCSD		RPD	%Recovery	
Parameter	Spk Added	Result	% Rec	Spk Added	Result	% Rec	RPD	CtrlLimit	CtrlLimit	Qual
Dibenzofuran	0.05	0.0420	84	0.05	0.0436	87.2	3.7	35	53-105	T
Fluoranthene	0.05	0.0469	93.7	0.05	0.0468	93.7	0.1	35	57-128	
Fluorene	0.05	0.0447	89.5	0.05	0.0458	91.6	2.4	35	59-121	
Indeno(1,2,3-cd)pyrene	0.05	0.0435	87	0.05	0.0444	88.7	2	35	52-122	
Naphthalene	0.05	0.0345	69.1	0.05	0.0343	68.7	0.7	35	40-110	
Phenanthrene	0.05	0.0423	84.6	0.05	0.0429	85.8	1.4	35	59-110	
Pyrene	0.05	0.0411	82.2	0.05	0.0417	83.4	1.4	35	57-115	



**Job ID**: 18061440

Date:

7/31/2018

Analysis : Total Recoverable Metals

Method:

**EPA 200.7** 

Reporting Units: mg/L

QC Batch ID: Qb18062960

Created Date: 06/29/18

Created By : csmith

Samples in This QC Batch: 18061440.02,03,04

Digestion:

PB18062924

Prep Method: EPA 200.7

**Prep Date:** 06/29/18 07:50 **Prep By:** 

Mwissman

QC Type: Method BI	ank					i i	
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	Qual
Antimony	7440-36-0	< MDL	mg/L	1	0.01	0.004	T
Arsenic	7440-38-2	< MDL	mg/L	1	0.01	0.004	
Barium	7440-39-3	< MDL	mg/L	1	0.01	0.004	
Beryllium	7440-41-7	< MDL	mg/L	1	0.01	0.004	
Cadmium	7440-43-9	< MDL	mg/L	1	0.01	0.002	
Chromium	7440-47-3	< MDL	mg/L	1	0.01	0.004	
Lead	7439-92-1	< MDL	mg/L	1	0.01	0.004	
Nickel	7440-02-0	< MDL	mg/L	1	0.01	0.004	
Selenium	7782-49-2	< MDL	mg/L	1	0.01	0.004	
Silver	7440-22-4	< MDL	mg/L	1	0.01	0.001	

QC Type: LCS and LC	SD									
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Antimony	1	1.03	103	1	1.04	104	1.2	20	85-115	
Arsenic	1	0.99	98.5	1	0.99	99.1	0.6	20	85-115	
Barium	1	0.97	96.8	1	0.97	97.2	0.4	20	85-115	
Beryllium	1	0.99	98.6	1	0.99	99.4	0.8	20	85-115	
Cadmium	1	0.96	96.1	1	0.97	96.7	0.6	20	85-115	
Chromium	1	0.98	97.5	1	0.98	98.2	0.7	20	85-115	
Lead	1	0.97	97.1	1	0.98	97.9	0.8	20	85-115	
Nickel	1	0.95	95.4	1	0.96	96	0.6	20	85-115	
Selenium	1	0.97	97.4	1	0.99	98.5	1.1	20	85-115	
Silver	1	0.97	97.3	1	0.98	98	0.7	20	85-115	

QC Type: MS and MS QC Sample ID: 1806										,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Antimony	BRL	1	1.09	109						75-125	
Arsenic	0.012	1	1.07	106						75-125	
Barium	0.102	1	1.09	98.8						75-125	
Beryllium	BRL	1	1.04	104						75-125	
Cadmium	BRL	1	0.97	96.5						75-125	
Chromium	BRL	1	1.00	99.2						75-125	1
Lead	BRL	1	0.96	95.7						75-125	
Nickel	0.013	1 1	0.97	95.7						75-125	

REVISED



**Job ID:** 18061440

Date:

7/31/2018

Analysis: Total Recoverable Metals

Method:

**EPA 200.7** 

Reporting Units : mg/L

QC Batch ID: Qb18062960

60 Cres

Created Date: 06/29/18

Created By: csmith

Samples in This QC Batch : 18061440.02,03,04

QC Type: MS and MSD QC Sample ID: 18061											* 1
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Selenium	BRL	1	1.03	103						75-125	
Silver	BRL	1	1.01	102						75-125	



**Job ID:** 18061440

Date:

7/31/2018

Analysis : Total Metals - Mercury

Method:

**EPA 245.1** 

Reporting Units: mg/L

QC Batch ID: Qb18070377 Created Date: 07/03/18

Created By: Ggorane

Samples in This QC Batch : 18061440.02,03,04

Digestion:

PB18070346

Prep Method: EPA 245.1

**Prep Date:** 07/03/18 09:32 **Prep By:** 

JYou

QC Type: Method Blank								
Parameter	CAS #	Result	Units	D.F.	MQL	MDL	1	Qual
Mercury	7439-97-6	< MDL	mg/L	1	0.0002	0.00006		

QC Type:	LCS and LCSI										
Parameter		LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Mercury		0.005	0.00514	103	0.005	0.00514	103	0	35	80-120	

QC Type: MS and MS QC Sample ID: 1807	D 70060.01										
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Mercury	BRL	0.005	0.00451	90						80-120	



**Job ID:** 18061440

Date:

7/31/2018

Analysis: Total Cyanide

Method:

SM 4500CNC/E

Reporting Units : mg/L

QC Batch ID: Qb18071006

Created Date: 07/09/18

Created By: LEBell

Samples in This QC Batch : 18061440.02,03,04

PB18071005

Sample Preparation:

Prep Method: SM 4500CNC/E

Prep Date: 07/09/18 14:00 Prep By:

LEBell

QC Type: Method Blank							Yes the second	
Parameter	CAS#	Result	Units	D.F.	MQL	MDL		Qual
Cyanide	57-12-5	< MDL	mg/L	1	0.005	0.004		

Cyanide	BRL	BRL	mg/L	0	20	
Parameter	QCSample Result	Sample Result	Units	RPD	RPD CtrlLimit	Qual
QC Sample ID:	18061440.03				4.00	516-
QC Type: Dupl	icate					

QC Type: LCS and LCS	Ď	246								
Parameter	LCS Spk Added	LCS Result	LCS % Rec	LCSD Spk Added	LCSD Result	LCSD % Rec	RPD	RPD CtrlLimit	%Recovery CtrlLimit	Qual
Cyanide	0.1	0.0982	98.2	0.1	0.0976	97.6		20	83-116	Quan

QC Type: MS a QC Sample ID:											
Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Spk Added	MSD Result	MSD % Rec	RPD	RPD CtrlLimit	%Rec CtrlLimit	Qual
Cyanide		0.1	0.0999	99.9						80-120	

Houston, TX 77029 713-453-6060 1-877-478-6060 Toll Free 713-453-6091 Fax ablabs.com	1. REPORT TO: 2. Company: (A) (Styl) Solvenia)	Same as " 1700 ft to ". 33	3. PO # 3a. A&B Ouote #
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A&B JOB ID #   80 U   440   Phone:	713-985-6400		☐ 3 Days* *Surcharge applies
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Many B	wishells is she shall	6/26/18 15:36	
0		Temps	Temperature: 5.3-0.1-5.2c
*Containers: VOA - 40 ml vial A/G - Amber/Glass 1 Liter 4 oz/8 cz - glass wide mouth P/O - Plastic/other	· · Preservatives: C · Cool H · HCl	N - HNO <sub>3</sub> S - H <sub>2</sub> SO <sub>4</sub> Intact	
9	BILL OF LADING/TRACKING		A&B cannot accept verbal changes Please FAX written changes to 713-453-6091



### **Sample Condition Checklist**

A&B	JobID:	1806144	10		ate Receive	ed: <b>06</b>	/26/2018		Time	Received :	3:36PM		
Clier	t Name :	Weston :	Solution	ns	2,200								
Tem	perature :	5.3-0.1	cf=53.2	2°C S	Sample pH:	<2	Metals; >12	2 CN					
Ther	mometer	D: 170762	29	р	H Paper ID	: 723	75					-	
					Che	ck Poin	ts				Yes	No	N/A
1.	Cooler se	al present a	nd signe	d.							,	X	
2.	Sample(s	s) in a coole	r <b>.</b>								Х		
3.	If yes, ic	e in cooler.									Х		
4.	Sample(s	s) received v	vith chai	n-of-custo	dy.						Х		
5.	C-O-C sig	ned and dat	ted.								Х		
6.	Sample(	s) received v	vith sign	ed sample	custody se	eal.						Х	
7.	Sample o	ontainers ar	rived int	act. (If no	comment).						X		
8.	Matrix :	Water	Soil	Liquid	Sludge	Solid	Cassette	Tube	Bulk	Badge	Food	Otl	her
		<b>V</b>											]
9.		s) were rece				s).					X		
10.	Sample(s	s) were rece	ived with	n proper p	reservative						Х		
11.	All samp	les were log	ged or la	beled.							X		
12.	Sample 1	D labels ma	tch C-O-	C ID's		***					X		
13.	Bottle co	unt on C-O-	C matche	es bottles i	found.						Х		
14.	Sample v	olume is suf	fficient f	or analyse	s requested	<b>.</b>					Х		
15.	Samples	were receive	ed within	the hold	time.			,			X		
16.	VOA vial	completely	filled.			-					X		
17.	Sample a	ccepted.									Х		
18	Has clie	nt been cont	acted al	out sub-c	out								Х
		clude action			-								
CN: N	aOH+Thio.	TPH in 60mL.	There is	no Cyandie	bottle fo 03;	Received	2 Cr6ANH 6	5-26-18.					
							- Y-00						
Pace	eived by :	Cartaga					Charle	n huldata i	Contorn	/ 06/26/2010			
Kece	aved by :	Sortega				•	Check	n by/date :	sortega	/ 06/26/2018			
Phone	: 713-453	-6060		• • • •						W	ww.ablabs	com	

www.ablabs.com

### DCS Summary

A&B JobID 18061440
Weston Solutions
01723.062.007.0002 / COH Brownfields
Mckinney Phase II
Sample Collected 6/26/2018

	A	100	Da.
1	September 1		-
P			S
	Á	i	¥
-	¥	1	E

%Rec	88
Spike Units	mg/L
Spike Amount	0.005
D.F.	_
Units	mg/L
Result	0.0044
Parameter	Cyanide
Method	SM 4500CNC/E
QCType	DCS
	Method Parameter Regult Units D.F.

EnteredBy LEBell

EnteredDate

07/26/2018

4	Enteredisy	Ggorane
4	EnteredDate	07/23/2018
	spike Units %Kec	mg/L 80
	Amount	0.0001
-	D.F.	-
	Units	mg/L
ţ	Kesult	0.0001
. \$	Parameter	Mercury
	Method	EPA 245.1
	QCType	DCS

	dBy		_		_		_	_		_		_	_	_	_	_		_	_	_			_	L	_	_	
	EnteredBy	csmith																									
	EnteredDate	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018	06/05/2018
	%Rec	249	307	107	104	107	130	104	210	105	109	108	192	105	114	106	115	107	136	114	200	113	170	151	119	2.66	144
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.01	0.004	0.004	0.004	0.004	0.004	0.01	0.004	0.004	0.004	0.1	0.004	0.002	0.004	0.02	0.004	0.004	0.004	0.004
(0)	D.F.	1	1	1	1	1	1	1	1	-	1	1	1	-	1	_	-	_	_	_	_	-	_	-		-	_
(0)	Units	mg/L																									
	Result	0.010	0.012	0.004	0.004	0.004	0.005	0.004	0.021	0.004	0.004	0.004	0.008	0.004	0.0114	0.004	0.005	0.004	0.136	0.005	0.014	0.005	0.034	900.0	0.005	0.004	900.0
	Parameter	Aluminum	Antimony	Arsenic	Barium	Beryllium	Boron	Cadmium	Calcium	Chromium	Cobalt	Copper	Iron	Lead	Magnesium	Manganese	Molybdenum	Nickel	Potassium	Selenium	Silicon	Silver	Sodium	Thallium	Titanium	Vanadium	Zinc
	Method	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7	EPA 200.7
	QCType	DCS																									

EnteredBy	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair
EnteredDate	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018
%Rec	76.8	74.7	77	75.3	110	102	88.5	2.96	159	119	107	78.5	95.7	81.7	95.3	124	115	58.8	114	110	140	91	97.5	87.5	83.2
Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Spike Amount	0.006	900.0	9000	900.0	900.0	900.0	9000	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	0.012	900.0	900.0	9000	900.0	900.0	900.0	0.006
D.F.	-	_	7	_	_	_	_	_	_	_	_	-	_	-	_	-	_	1	-	-	_	-	1	1	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Result	0.00461	0.00448	0.00462	0.00452	1 0.00661	1 0.00614	0.00531	0.00580	0.00951	0.00713	0.00640	0.00471	0.00574	0.00490	0.00572	0.00746	0.00691	ls 0.00705	te 0.00681	0.00657	0.00837	0.00546	0.00585	0.00525	0.00499
Parameter	1,2,4- Trichlorobenzene	1,2-Dichlorobenzene	1,3-Dichlorobenzene	1,4-Dichlorobenzene	2,4,5-Trichlorophenol 0.00661	2,4,6-Trichlorophenol 0.00614	2,4-Dichlorophenol	2,4-Dimethylphenol	2,4-Dinitrophenol	2,4-Dinitrotoluene	2,6-Dinitrotoluene	2-Chloronaphthalene	2-Chlorophenol	2-Methylnaphthalene	2-Methylphenol	2-Nitroaniline	2-Nitrophenol	3- & 4-Methylphenols 0.00705	3,3-Dichlorobenzidine 0.00681	3-Nitroaniline	4,6-Dinitro-2-methylphenol	4-Bromophenyl phenyl ether	4-Chloro-3- methylphenol	4-Chloroaniline	4-Chlorophenyl phenyl ether
	OΩ	00	00	00	00	00	00	00	00	00	00	00	00	00	QO	00	00	OD	00	QO	OO	00	00	00	00
Method	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D
OCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

	EnteredBy	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair
	EnteredDate	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018
	%Rec	109	2.68	85.2	85.5	86.2	96.3	83.7	112	106	106	112	85	78.5	10.3	116	88.2	76.8	72	136	127	7.66	82.8	96	83	89.2
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	900.0	90000	900.0	900.0	900.0	90000	90000	900.0	90000	900.0	900.0	900.0	900.0	90000	900.0	900.0	90000	900.0	9000	900.0	900.0	900.0	9000	900.0	9000
O	D.F.	-	1	-	-	1	1	1	1	_	1	1	1	1	_	_	_	-	-	1	_	-	1	1	_	1
COL	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Result	0.00651	0.00538	0.00511	0.00513	0.00517	0.00578	0.00502	0.00669	0.00635	0.00638	e 0.00673	0.00510	e 0.00471	0.00062	0.00694	0.00529	0.00461	1)0.00432	0.00814	I phthalate 0.00762	0.00598	0.00497	0.00576	0.00498	0.00535
	Parameter	4-Nitroaniline	4-Nitrophenol	Acenaphthene	Acenaphthylene	Aniline	Anthracene	Azobenzene	Benzidine	Benzo(a)anthracene	Benzo(a)pyrene	Benzo(b)fluoranthene 0.00673	Benzo(g,h,i)perylene	Benzo(k)fluoranthene 0.00471	Benzoic acid	Benzyl alcohol	Bis(2-chloroethoxy) methane	Bis(2-chloroethy1) ether	Bis(2-chloroisopropyl)0.00432 ether	Bis(2-ethylhexyl) phthalate	S.	Carbazole	Chrysene	Dibenzo(a,h) anthracene	Dibenzofuran	Diethyl phthalate
	Method	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D
	QCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

	EnteredBy	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair	VNair
	EnteredDate	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018	06/16/2018
	%Rec	87.3	131	150	103	86.7	86.3	78	134	83.5	96	101	79.5	110	73.3	89.5	8.96	133	83.5	69.5	102	49
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	900.0	9000	900.0	9000	9000	9000	90000	90000	900.0	900.0	9000	9000	900.0
٥١	D.F.	_	_	1	_	-	-	-	1	_	1	_	-	_	1	_	-	_	_	_	1	_
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Result	0.00524	0.00786	0.00901	0.00615	0.00520	0.00518	0.00468	0.00801	0.00501	0.00576	0.00603	0.00477	0.00659	0.00440	0.00537	0.00581	0.00798	0.00501	0.00417	0.00612	0.00294
	Parameter	Dimethyl phthalate	Di-n-butyl phthalate	Di-n-octyl Phthalate	Fluoranthene	Fluorene	Hexachlorobenzene	Hexachlorobutadiene 0.00468	Hexachlorocyclopenta 0.00801 diene	Hexachloroethane	Indeno(1,2,3-cd)	Isophorone	Naphthalene	Nitrobenzene	N- Nitrosodimethylamine	N-nitroso-di-n- propylamine	N- Nitrosodiphenylamine	Pentachlorophenol	Phenanthrene	Phenol	Pyrene	Pyridine
	QCType Method	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D	SW-846 8270D
	QCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

					A B					
QCType	Method	Parameter	Result	Units	D.F.	Spike Amount	Spike Units	%Rec	EnteredDate	EnteredBy
DCS	TX 1005	C6-C12	1.36	mg/L	1	1.5	mg/L	7.06	06/29/2018	MKulkarni
DCS	TX 1005	>C12-C28	1.32	mg/L	-	1.5	mg/L	88	06/29/2018	MKulkarni
DCS	TX 1005	>C28-C35	1.65	mg/L	-	1.5	mg/L	110	06/29/2018	MKulkarni
DCS	TX 1005	Total C6-C35	4.33	mg/L 1	_	4.5	mg/L	96.2	06/29/2018	MKulkarni



1	EnteredBy	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev
ļ	EnteredDate	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018
	%Rec	122	139	127	137	137	133	128	158	135	141	131	137	109	126	131	125	131	138	117	143	136	133	134	131	136
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
-	D.F.	1	1	_	_	-	-	-	-	1	-	_	-	_	_	_	_	_	_	-	_	_	_	_	_	-
	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Result	0.00489	0.00554	0.00508	0.00546	0.00547	0.00531	0.00511	0.00631	0.00539	0.00565	0.00524	0.00547	0.00435	0.00503	0.00522	0.00498	0.00522	0.00551	0.00468	0.00571	0.00542	0.00532	0.00535	0.00525	0.00546
	Parameter	1,1,1,2- Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2- Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethylene	1,1-Dichloropropene	1,2,3-trichlorobenzene 0.00631	1,2,3- Trichloropropane		1,2,4- Trimethylbenzene	1,2-Dibromo-3- chloropropane	hane	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5- Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	Benzene
7	Method	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C
	QCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

Page 55 of 62

	EnteredBy	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev	Rajeev
	EnteredDate	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018	07/23/2018
	%Rec	135	140	117	128	143	139	129	158	134	148	131	103	129	128	122	122	123	127	119	92.3	123	149	126	133	114
	Spike Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Spike Amount	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.008	0.004	0.004	0.004	0.004	0.004	0.004	0.004
(A)	D.F.	-	-	_	-	1	1	1	_	1	1	_	_	1	-	_	1	_	-	1	_	1	1	-	1	_
OF	Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	Result	0.00539	0.00560	n 0.00469	0.00511	0.00572	0.00554	0.00514	0.00633	0.00535	0.00593	0.00523	0.00412	n 0.00516	0.00511	ia0.00489	0.00487	0.00493	0.0102	0.00477	0.00369	0.00493	0.00594	0.00504	0.00532	0.00456
	Parameter	Bromobenzene	Bromochloromethane 0.00560	Bromodichloromethan 0.00469 e	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chloroethane	Chloroform	Chloromethane	cis-1,2- Dichloroethylene	cis-1,3- Dichloropropene	Dibromochloromethan 0.00516 e	Dibromomethane	Dichlorodifluorometha0.00489	Ethylbenzene	Isopropylbenzene	m- & p-Xylenes	MEK	Methylene chloride	MTBE	Naphthalene	n-Butylbenzene	n-Propylbenzene	o-Xylene
	Method	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C	SW-846 8260C
	QCType	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS	DCS

				00000	No. and Commercial Com					
QCType Method		Parameter	Result	Units	D.F.	Spike Amount	Spike Units %Rec	%Rec	EnteredDate	EnteredBy
SW-846 8260C	00	sec-Butylbenzene	0.00531	mg/L	-	0.004	mg/L	133	07/23/2018	Rajeev
SW-846 8260C	20C	Styrene	0.00450	mg/L	-	0.004	mg/L	112	07/23/2018	Rajeev
SW-846 8260C	209C	t-butylbenzene	0.00523	mg/L	1	0.004	mg/L	131	07/23/2018	Rajeev
SW-846 8260C	260C	Tetrachloroethylene	0.00551	mg/L	1	0.004	mg/L	138	07/23/2018	Rajeev
SW-846 8260C	260C	Toluene	0.00554	mg/L	-	0.004	mg/L	138	07/23/2018	Rajeev
SW-846 8260C	3260C	trans-1,2- Dichloroethylene	0.00525	mg/L	- ,	0.004	mg/L	131	07/23/2018	Rajeev
SW-846 8260C	8260C	trans-1,3- Dichloropropene	0.00517	mg/L	-	0.004	mg/L	129	07/23/2018	Rajeev
SW-846 8260C	3260C	Trichloroethylene	0.00496	mg/L	_	0.004	mg/L	124	07/23/2018	Rajeev
SW-846 8260C	3260C	Trichlorofluoromethan 0.00406	n0.00406	mg/L	-	0.004	mg/L	102	07/23/2018	Rajeev
SW-846 8260C	3260C	Vinyl Chloride	0.00598	mg/L	1	0.004	mg/L	149	07/23/2018	Rajeev
SW-846 8260C	3260C	Xylenes	0.01476	mg/L	1	0.012	mg/L	123	07/28/2018	Rajeev



#### Laboratory Data Package Cover Page

This data package is for Job No. 18061440 and laboratory batch no(s). Qb18062711,Qb18062750,Qb18062807,Qb18062919,Qb18062960,Qb18070377,Qb18071006 and consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- M R3 Test reports (analytical data sheets) for each environmental sample that includes:
  - a. Items consistent with NELAC Chapter 5,
  - b. dilution factors,
  - c. preparation methods,
  - d. cleanup methods, and
  - e. if required for the project, tentatively identified compounds (TICs).
- M R4 Surrogate recovery data including:
  - a. Calculated recovery (%R), and
  - b. The laboratory's surrogate QC limits.
- ☑ R6 Test reports/summary forms for laboratory control samples (LCSs) including:
  - c. LCS spiking amounts,
  - d. Calculated %R for each analyte, and
  - e. The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
  - f. Samples associated with the MS/MSD clearly identified,
  - g. MS/MSD spiking amounts,
  - h. Concentration of each MS/MSD analyte measured in the parent and spiked samples,
  - i. Calculated %Rs and relative percent differences (RPDs), and
  - i. The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
  - k. The amount of analyte measured in the duplicate,
  - I. The calculated RPD, and
  - m. The laboratory's QC limits for analytical duplicates.
- M R9 List of method quantitation limits (MQLs) and detectability check sample results for each analyte for each method and matrix.
- R10 Other problems or anomalies.

The Exception Report for each "No" or "Not Reviewed (NR)" item in Laboratory Review Checklist and for each analyte, matrix, and method for which the laboratory does not hold NELAC accreditation under the Texas Laboratory Accreditation Program.

Release Statement: I am responsible for the release of this laboratory data package. This laboratory is NELAC accredited under the Texas Laboratory Accreditation Program for all the methods, analytes, and matrices reported in this data package except as noted in the Exception Reports. The data have been reviewed and are technically compliant with the requirements of the methods used, except where noted by the laboratory in the Exception Reports. By my signature below, I affirm to the best of my knowledge all problems/ anomalies observed by the laboratory have been identified in the Laboratory Review Checklist, and no information affecting the quality of the data has been knowingly withheld.

Check, if applicable: [ ] This laboratory meets an exception under 30 TAC §25.6 and was last inspection by [ ] TCEQ or [ ] \_\_\_\_\_\_ on \_\_\_\_\_. Any findings affecting the data in this laboratory data package are noted in the Exception Reports herein. The official signing the cover page of the report in which these data are used is responsible forreleasing this data package and is by signature affirming the above release statement is true.

Name (Printed)	Signature	Official Title (Printed)	Date
Alisha Hughes	arism Hugues	Project Manager	07/31/2018

#### Laboratory Review Checklist: Reportable Data



Project Name: 01723.062.007.0002 / COH Brownfields Mckinney Phase II

A&B Job ID: 18061440 Reviewed By: AHughes Date Reviewed: 07/31/2018

Qb18062711,Qb18062750,Qb18062807,Qb18062877,Qb18062886,Qb18062919,Qb18062960,Qb18070377,Qb18071006 Prep Batch Number(s):

#	Α	Description	Yes	No	NA	NR	ER#
R1	OI	Chain-of Custody					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				2
		2) Were all departures from standard conditions described in an exception report?	X				
R2	OI	Sample and Quality Control (QC) Identification					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross referenced to corresponding QC data?	X				
R3	OI	Test Reports					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results <mql, all="" calibration="" other="" range?<="" reported="" results="" td="" were="" within=""><td></td><td>X</td><td></td><td></td><td>R3/2</td></mql,>		X			R3/2
		3) Were calculations subject to appropriate checks?	X				
		4) Were all analyte identifications subject to appropriate checks?	X				
		5) Were all sample quantitation limits reported for all analytes not detected?	X				
		Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Was % moisture (or solids) reported for all samples?			X		
		8) Were bulk soils/solids samples for volatile analysis extracted with methanol per SW846 Method 5035			X		
		9) If required for the project, were tentatively dentified compounds (TICs) reported?			X		
R4	OI	Surrogate Recovery Data					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries (%R) within the laboratory QC limits?	X				
R5	OI	Test Reports/Summary Forms for Blank Samples					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blanks free of detected target compounds and, if applicable, reported TICs?	X				
R6	OI	Laboratory Control Samples (LCS)					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps ?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?	X				
		5) Were LCSs spiked at or below the LORP or do the detectability data document the laboratory's capability of detecting the COCs in samples spiked at the MDL?	X				
		6) Was the LCSD RPD within QC limits?	X				
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data					
		Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				
		3) Were MS (and MSD, if applicable) %R within the laboratory QC limits?		X			R7/3
		4) Were MS/MSD RPDs within laboratory QC limits?	X				
R8	OI	Analytical Duplicate Data					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
		3) Were RPDs or relative standard deviations within the laboratory QC limits?	X				
R9	OI	Method Quatitation Limits MQLs)					
		Are the MQLs for each method analyte listed and included in the laboratory data package?	X				
		-/	11	1			1



#### Laboratory Review Checklist: Reportable Data

Project Name: 01723.062.007.0002 / COH Brownfields Mckinney Phase II

18061440 A&B Job ID:

Reviewed By: AHughes Date Reviewed: 07/31/2018

Prep Batch Number(s): Qb18062711,Qb18062750,Qb18062807,Qb18062877,Qb18062886,Qb18062919,Qb18062960,Qb18070377,Qb18071006

#	Α	Description	Yes	No	NA	NR	ER#
		3) Are unadjusted MQLs included in the laboratory data package?	X				
R10	OI	Other Problems/Anomalies					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?		X			R10/1
		Was applicable and available technology used to lower the SDL to minimize the matrix interference effects on the sample results?	Х				
		3) Is the laboratory NELAC-accredited under the Texas Laboratory Accreditation Program for the analytes, matrices and methods associated with this laboratory data package?	Х				

S1	OI	INITIAL CALIBRATION (ICAL)			
		1) Were response factors (RFs) and/or relative response factors (RRFs) for each analyte within the QC limits?	X		
		2) Were percent RSDs or correlation coefficient criteria met?	X		
		3) Were the number of standards recommended in the method used for all analytes?	X		
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	Х		
		5) Are ICAL data available for instruments used?	X		
		6) Has the initial calibration curve been verified using an appropriate second source standard?	X		
S2	OI	INITIAL AND CONTINUING CALIBRATION VERIFICATION (ICCV AND CCV) AND CONTINUING CALIBRATION BLANK (CCB):			
		1) Was the CCV analyzed at the method-required frequency?	X		
		2) Were percent differences for each analyte within the method-required QC limits?	X		
		3) Was the ICAL curve verified for each analyte?	X.		
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?	X		
S3	0	MASS SPECTRAL TUNING:			
		1) Was the appropriate compound for the method used for tuning?	X		
		2) Were ion abundance data within the method-required QC limits?	X		
S4	0	INTERNAL STANDARDS (IS):			
		Were IS area counts and retention times within the method-required QC limits?	X		
S5	OI	Raw data (NELAC Section 5.5.10)			
		1) Were the raw data (e.g., chromatograms, and spectral data) reviewed by an analyst?	X		
		2) Were data associated with manual integrations flagged on the raw data?	X		
S6	OI	DUAL COLUMN CONFIRMATION			
		Did dual column confirmation results meet the method-required QC?	X		
S7	OI	TENTATIVELY IDENTIFIED COMPOUNDS (TICS):			
		If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?		X	
S8	OI	INTERFERENCE CHECK SAMPLE (ICS) RESULTS:			
		Were percent recoveries within method QC limits?	X		
S9	OI	SERIAL DILUTIONS, POST DIGESTION SPIKES, AND METHOD OF STANDARD ADDITIONS			
		Were percent differences, recoveries, and the linearity within the QC limits	X		
S10	OI	VERIFICATION/VALIDATION DOCUMENTATION FOR METHODS			
		Are all methods documented and verified and validated, where applicable, (NELAC 5.10.2 or ISO/IEC 17025 Section 5.4.5)?	Х		
S11	OI	METHOD DETECTION LIMIT (MDL) STUDIES			
		1) Was a MDL study performed for each reported analyte?	X		
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X		
S12	OI	STANDARDS DOCUMENTATION			
		Are the standards used in the analyses NIST-traceable or obtained from other appropriate sources?	Х		

#### Laboratory Review Checklist: Reportable Data



Project Name: 01723.062.007.0002 / COH Brownfields Mckinney Phase II

A&B Job ID: 18061440 Reviewed By: AHughes

Date Reviewed: 07/31/2018 Prep Batch Number(s): Qb18062711,Qb18062750,Qb18062807,Qb18062877,Qb18062886,Qb18062919,Qb18062960,Qb180

70377,Qb18071006

#	Α	Description	Yes	No	NA	NR	ER#
S13	OI	COMPOUND/ANALYTE IDENTIFICATION PROCEDURES					
		Are the procedures for compound/analyte identification documented?	X				
S14 (	OI	DEMONSTRATION OF CAPABILITY (DOC)					
		1) Was DOC conducted generally consistent with NELAC 5C or ISO/IEC 4.2.2?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	PROFICIENCY TEST REPORTS:					
		Are proficiency testing or inter-laboratory comparison results on file?	X				
S16	OI	LABORATORY STANDARD OPERATING PROCEDURES (SOPS):					
		Are laboratory SOPs current and on file for each method performed?	X				

ER#				
R3/2	J - Estimation. Below calibration range but above MDL.			
	( J )TB-2	18061440.01	Qb18062711	VOC
	( J )MW-1	18061440.02	Qb18062711	BTEX+MTBE
	( J )MW-1	18061440.02	Qb18062960	Metals
	( J )MW-1	18061440.02	Qb18062877	Metals_Dissolved
	( J )MW-12	18061440.03	Qb18062960	Metals
	( J )MW-12	18061440.03	Qb18062877	Metals_Dissolved
	( J )MW-12	18061440.03	Qb18062711	VOC
	( J )MW-2	18061440.04	Qb18062960	Metals
	( J )MW-2	18061440.04	Qb18062877	Metals_Dissolved
R7/3	M1 - Matrix Spike and/or Matrix Spike Dup Matrix Spike and/or Matrix Spike Duplicate r Spike and/or Matrix Spike Duplicate recover	ecovery is below laborator	ry control limits due t	its due to matrix interference., M2 - to matrix interference., M8 - Matrix
	( M1 )MW-1	18061440.02	Qb18062877	Metals_Dissolved
	( M2 )MW-1	18061440.02	Qb18062877	Metals_Dissolved
	( M8 )MW-2	18061440.04	Qb18062711	VOC
R10/1	DCS report on file and are available upon re	quest.		
		***		energy and the second

O = organic analyses;

I = inorganic analyses (and general chemistry, when applicable);

NA = Not applicable;

NR = Not Reviewed;

ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

### TABLE A-1 DATA QUALIFIER DEFINITIONS

Qualifier	Definitions
U	The analyte was analyzed for but was not detected above the sample quantitation limit (SDL). The associated value presented in the tables is the method quantitation limit. The sample quantitation limit is not provided in the tables however, the SDL may be found in the analytical laboratory report.
J	The associated value is an estimated quantity.
UJ	The material was analyzed for but was not detected above the reported sample quantitation limit. The associated value is an estimate and may be inaccurate or imprecise.
N	Tentatively identified; The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	Tentatively identified, reported concentration is estimated: The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents the analyte's approximate concentration.
R	Rejected: The data are unusable. (Note: The presence or absence of the analyte cannot be confirmed.)
X1	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory is an on-site or in-house laboratory, defined in 30 TAC 25, and is accredited or periodically inspected at least every 3 years by TCEQ.
X2	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory is an on-site or in-house laboratory, defined in 30 TAC 25, is located outside of Texas, and is accredited or periodically inspected by that state.
Х3	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory is an on-site or in-house laboratory, defined in 30 TAC 25, is inspected at least every 3 years by the TCEQ, and the work is performed for another company with a unit located on the same site as the laboratory.
X4	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory is an on-site or in-house laboratory, defined in 30 TAC 25, is inspected at least every 3 years by the TCEQ, and the work is performed without compensation for a governmental agency or a charitable organization.

### **ECS Environmental Chemistry Services**

Qualifier	Definitions
X5	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory is accredited under federal law, including certification by the USEPA to provide these data for decisions related to the Safe Drinking Water Act.
X6	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The laboratory provides these data necessary for emergency response activities and the required analytical data are not available from a laboratory accredited under the Texas Laboratory Accreditation Program.
X7	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The TCEQ does not offer accreditation for this analyte, in this matrix, analyzed by this method.
X8	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The TCEQ does offers accreditation for this analyte, in this matrix, analyzed by this method, but the laboratory is not accredited for this analyte in this matrix by this method. The analyte result is validated and reported as part of a suite of analytes for the method.
Х9	The laboratory is not NELAC accredited under the Texas Laboratory Accreditation Program for this analyte in this matrix analyzed by this method. The analyte result was generated prior to July 1, 2008.

Bias Codes	
Н	Bias in sample result likely to be high
L	Bias in sample result likely to be low

ECS Environmental Chemistry Services
APPENDIX B – NELAP CERTIFICATE





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Air & Emissions			
Method ASTM D1946			
Analyte	AB	Analyte ID	Method ID
Carbon dioxide	TX	3755	30024465
Carbon monoxide	TX	3780	30024465
Ethane	TX	4747	30024465
Hydrogen	TX	10321	30024465
Methane	TX	4926	30024465
Nitrogen	TX	1843	30024465
Oxygen	TX	3895	30024465
Method EPA RM 18			
Analyte	AB	Analyte ID	Method ID
1,3-Butadiene	TX	9318	10246636
1-Propene (Propylene)	TX	4836	10246636
Benzene	TX	4375	10246636
Butene (all isomers)	TX	10326	10246636
Ethane	TX	4747	10246636
Ethene	TX	4752	10246636
Ethylbenzene	TX	4765	10246636
Methane	TX	4926	10246636
n-Butane	TX	5007	10246636
n-Hexane	TX	4855	10246636
n-Pentane	TX	5028	10246636
n-Propane	TX	5029	10246636
Toluene	TX	5140	10246636
Xylene (total)	TX	5260	10246636
Method EPA TO-14A			
Analyte	AB	Analyte ID	Method ID
1,1,1-Trichloroethane	TX	5160	10312002
1,1,2,2-Tetrachloroethane	TX	5110	10312002
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10312002
1,1,2-Trichloroethane	TX	5165	10312002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019
Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Air & Emissions			
1,1-Dichloroethane	TX	4630	10312002
1,1-Dichloroethylene	TX	4640	10312002
1,2,4-Trichlorobenzene	TX	5155	10312002
1,2,4-Trimethylbenzene	TX	5210	10312002
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10312002
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	TX	4695	10312002
1,2-Dichlorobenzene	TX	4610	10312002
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10312002
1,2-Dichloropropane	TX	4655	10312002
1,3,5-Trimethylbenzene	TX	5215	10312002
1,3-Dichlorobenzene	TX	4615	10312002
1,4-Dichlorobenzene	TX	4620	10312002
Benzene	TX	4375	10312002
Benzyl chloride	TX	5635	10312002
Carbon tetrachloride	TX	4455	10312002
Chlorobenzene	TX	4475	10312002
Chloroethane (Ethyl chloride)	TX	4485	10312002
Chloroform	TX	4505	10312002
cis-1,2-Dichloroethylene	TX	4645	10312002
cis-1,3-Dichloropropene	TX	4680	10312002
Dichlorodifluoromethane (Freon-12)	TX	4625	10312002
Ethylbenzene	TX	4765	10312002
Hexachlorobutadiene	TX	4835	10312002
Methyl bromide (Bromomethane)	TX	4950	10312002
Methyl chloride (Chloromethane)	TX	4960	10312002
Methylene chloride (Dichloromethane)	TX	4975	10312002
Styrene	TX	5100	10312002
Tetrachloroethylene (Perchloroethylene)	TX	5115	10312002
Toluene	TX	5140	10312002
trans-1,2-Dichloroethylene	TX	4700	10312002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Air & Emissions			
trans-1,3-Dichloropropylene	TX	4685	10312002
Trichloroethene (Trichloroethylene)	TX	5170	10312002
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10312002
Vinyl chloride	TX	5235	10312002
Xylene (total)	TX	5260	10312002
Method EPA TO-15			
Analyte	AB	Analyte ID	Method ID
1,1,1-Trichloroethane	TX	5160	10248803
1,1,2,2-Tetrachloroethane	TX	5110	10248803
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10248803
1,1,2-Trichloroethane	TX	5165	10248803
1,1-Dichloroethane	TX	4630	10248803
1,1-Dichloroethylene	TX	4640	10248803
1,2,3-Trimethylbenzene	TX	5182	10248803
1,2,4-Trichlorobenzene	TX	5155	10248803
1,2,4-Trimethylbenzene	TX	5210	10248803
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10248803
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	TX	4695	10248803
1,2-Dichlorobenzene	TX	4610	10248803
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10248803
1,2-Dichloropropane	TX	4655	10248803
1,3,5-Trimethylbenzene	TX	5215	10248803
1,3-Butadiene	TX	9318	10248803
1,3-Dichlorobenzene	TX	4615	10248803
1,4-Dichlorobenzene	TX	4620	10248803
1,4-Dioxane (1,4-Diethyleneoxide)	TX	4735	10248803
1-Butene	TX	4917	10248803
1-Pentene	TX	4833	10248803
1-Propene (Propylene)	TX	4836	10248803
2,2,4-Trimethylpentane (Isooctane)	TX	5220	10248803





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc. 10100 East Freeway, Suite 100

Houston, TX 77029-1919

trix: Air & Emissions			
2,2-Dimethylbutane	TX	4666	10248803
2,3,4-Trimethylpentane	TX	4667	10248803
2,3-Dimethylbutane	TX	4669	10248803
2,3-Dimethylpentane	TX	4671	10248803
2,4-Dimethylpentane	TX	4672	10248803
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10248803
2-Ethyltoluene	TX	4538	10248803
2-Methylbutadiene (Isoprene)	TX	4937	10248803
2-Methylbutane (Isopentane)	TX	4938	10248803
2-Methylheptane	TX	4939	10248803
2-Methylhexane	TX	10235	10248803
2-Methylpentane (Isohexane)	TX	4941	10248803
2-methylpropane (Isobutane)	TX	4942	10248803
3-Ethyltoluene	TX	4531	10248803
3-Methylheptane	TX	4532	10248803
3-Methylhexane	TX	4533	10248803
3-Methylpentane	TX	4534	10248803
4-Ethyltoluene	TX	4542	10248803
Benzene	TX	4375	10248803
Benzyl chloride	TX	5635	10248803
Bromodichloromethane	TX	4395	10248803
Bromoform	TX	4400	10248803
Carbon tetrachloride	TX	4455	10248803
Chlorobenzene	TX	4475	10248803
Chlorodibromomethane	TX	4575	10248803
Chloroethane (Ethyl chloride)	TX	4485	10248803
Chloroform	TX	4505	10248803
cis-1,2-Dichloroethylene	TX	4645	10248803
cis-1,3-Dichloropropene	TX	4680	10248803
cis-2-Butene	TX	4602	10248803





#### **NELAP - Recognized Laboratory Fields of Accreditation**

T104704213-18-17 Certificate:

**Expiration Date:** 3/31/2019 4/1/2018

Issue Date:

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

trix: Air & Emissions			
cis-2-pentene	TX	4603	10248803
Cyclohexane	TX	4555	10248803
Cyclopentane	TX	4562	10248803
Dichlorodifluoromethane (Freon-12)	TX	4625	10248803
Ethylbenzene	TX	4765	10248803
Hexachlorobutadiene	TX	4835	10248803
Isopropylbenzene (Cumene)	TX	4900	10248803
m+p-xylene	TX	5240	10248803
m-Diethylbenzene	TX	10252	10248803
Methyl bromide (Bromomethane)	TX	4950	10248803
Methyl chloride (Chloromethane)	TX	4960	10248803
Methyl isobutyl ketone (Hexone) (MIBK)	TX	4985	10248803
Methyl methacrylate	TX	4990	10248803
Methyl tert-butyl ether (MTBE)	TX	5000	10248803
Methylcyclohexane	TX	4965	10248803
Methylcyclopentane	TX	4966	10248803
Methylene chloride (Dichloromethane)	TX	4975	10248803
n-Butane	TX	5007	10248803
n-Decane	TX	5875	10248803
n-Heptane	TX	4825	10248803
n-Hexane	TX	4855	10248803
n-Nonane	TX	5026	10248803
n-Octane	TX	5027	10248803
n-Pentane	TX	5028	10248803
n-Propane	TX	5029	10248803
n-Propylbenzene	TX	5090	10248803
n-Undecane	TX	10261	10248803
o-Xylene	TX	5250	10248803
p-Diethylbenzene	TX	10262	10248803
Styrene	TX	5100	10248803





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

atrix: Air & Emissions			
Tetrachloroethylene (Perchloroethylene)	TX	5115	10248803
Toluene	TX	5140	10248803
trans-1,2-Dichloroethylene	TX	4700	10248803
trans-1,3-Dichloropropylene	TX	4685	10248803
trans-2-Butene	TX	4607	10248803
trans-2-pentene	TX	4608	10248803
Trichloroethene (Trichloroethylene)	TX	5170	10248803
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10248803
Vinyl acetate	TX	5225	10248803
Vinyl chloride	TX	5235	10248803
Xylene (total)	TX	5260	10248803





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Biological Tissues			
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Antimony	TX	1005	10155905
Arsenic	TX	1010	10155905
Beryllium	TX	1020	10155905
Cadmium	TX	1030	10155905
Chromium	TX	1040	10155905
Copper	TX	1055	10155905
Lead	TX	1075	10155905
Nickel	TX	1105	10155905
Selenium	TX	1140	10155905
Silver	TX	1150	10155905
Thallium	TX	1165	10155905
Zinc	TX	1190	10155905
Method EPA 7471			
Analyte	AB	Analyte ID	Method ID
Mercury	TX	1095	10166457
Method EPA 8081			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	TX	7355	10178606
4,4'-DDE	TX	7360	10178606
4,4'-DDT	TX	7365	10178606
Aldrin	TX	7025	10178606
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10178606
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10178606
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10178606
Dieldrin	TX	7470	10178606
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10178606
Heptachlor	TX	7685	10178606
Heptachlor epoxide	TX	7690	10178606





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Biological Tissues			
Method EPA 8082			
Analyte	АВ	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	TX	8880	10179201
Aroclor-1221 (PCB-1221)	TX	8885	10179201
Aroclor-1232 (PCB-1232)	TX	8890	10179201
Aroclor-1242 (PCB-1242)	TX	8895	10179201
Aroclor-1248 (PCB-1248)	TX	8900	10179201
Aroclor-1254 (PCB-1254)	TX	8905	10179201
Aroclor-1260 (PCB-1260)	TX	8910	10179201
PCBs (total)	TX	8870	10179201
Method EPA 8270			
Analyte	AB	Analyte ID	Method ID
Benzo(a)anthracene	TX	5575	10186002
Benzo(a)pyrene	TX	5580	10186002
Chrysene	TX	5855	10186002
Hexachlorobenzene	TX	6275	10186002
Hexachlorobutadiene	TX	4835	10186002
Hexachloroethane	TX	4840	10186002
Pentachlorophenol	TX	6605	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date:** Issue Date: 3/31/2019 4/1/2018

10100 East Freeway, Suite 100

A & B Environmental Services, Inc.

Houston, TX 77029-1919

Matrix: Drinking Water			
Method EPA 120.1			
Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	10006403
Method EPA 130.2			
Analyte	AB	Analyte ID	Method ID
Hardness	TX	1750	10007202
Method EPA 160.1			
Analyte Residue-filterable (TDS)	<b>AB</b> TX	Analyte ID 1955	Method ID 10009208
,	17	1933	10009208
Method EPA 160.2	АВ	Analyte ID	Method ID
Analyte Residue-nonfilterable (TSS)	TX	1960	10009606
Method EPA 200.7		1700	10007000
Analyte	АВ	Analyte ID	Method ID
Aluminum	TX	1000	10013806
Antimony	TX	1005	10013806
Arsenic	TX	1010	10013806
Barium	TX	1015	10013806
Beryllium	TX	1020	10013806
Boron	TX	1025	10013806
Cadmium	TX	1030	10013806
Chromium	TX	1040	10013806
Cobalt	TX	1050	10013806
Copper	TX	1055	10013806
Iron	TX	1070	10013806
Lead	TX	1075	10013806
Lithium	TX	1080	10013806
Magnesium	TX	1085	10013806
Manganese	TX	1090	10013806
Molybdenum	TX	1100	10013806
Nickel	TX	1105	10013806





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

latrix: Drinking Water			
Phosphorus	TX	1910	10013806
Potassium	TX	1125	10013806
Selenium	TX	1140	10013806
Silica as SiO2	TX	1990	10013806
Silver	TX	1150	10013806
Sodium	TX	1155	10013806
Strontium	TX	1160	10013806
Thallium	TX	1165	10013806
Tin	TX	1175	10013806
Titanium	TX	1180	10013806
Vanadium	TX	1185	10013806
Zinc	TX	1190	10013806
Method EPA 200.8			
Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10014605
Antimony	TX	1005	10014605
Arsenic	TX	1010	10014605
Barium	TX	1015	10014605
Beryllium	TX	1020	10014605
Cadmium	TX	1030	10014605
Chromium	TX	1040	10014605
Copper	TX	1055	10014605
Lead	TX	1075	10014605
Manganese	TX	1090	10014605
Nickel	TX	1105	10014605
Selenium	TX	1140	10014605
Silver	TX	1150	10014605
Thallium	TX	1165	10014605
Zinc	TX	1190	10014605
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: Expiration Date:

T104704213-18-17

Issue Date:

3/31/2019 4/1/2018

10100 East Freeway, Suite 100

A & B Environmental Services, Inc.

Houston, TX 77029-1919

Matrix: Drinking Water			
Mercury	TX	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrite as N	TX	1840	10053200
Sulfate	TX	2000	10053200
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	10060001
Method EPA 335.2			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	10278203
Method EPA 340.2			
Analyte	AB	Analyte ID	Method ID
Fluoride	TX	1730	10062201
Method EPA 504.1			
Analyte (BBOB)	AB	Analyte ID	Method ID
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10082801
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10082801
Method EPA 524.2	4.5		
Analyte	<b>AB</b> TX	Analyte ID	Method ID
1,1,1-Trichloroethane		5160	10088809
1,1,2-Trichloroethane	TX	5165	10088809
1,1-Dichloroethylene	TX	4640	10088809
1,2,4-Trichlorobenzene	TX	5155	10088809
1,2-Dichlorobenzene	TX	4610	10088809
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10088809
1,2-Dichloropropane	TX	4655	10088809





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

latrix: Drinking Water			
1,4-Dichlorobenzene	TX	4620	10088809
Benzene	TX	4375	10088809
Carbon tetrachloride	TX	4455	10088809
Chlorobenzene	TX	4475	10088809
cis-1,2-Dichloroethylene	TX	4645	10088809
Ethylbenzene	TX	4765	10088809
m+p-xylene	TX	5240	10088809
Methylene chloride (Dichloromethane)	TX	4975	10088809
o-Xylene	TX	5250	10088809
Styrene	TX	5100	10088809
Tetrachloroethylene (Perchloroethylene)	TX	5115	10088809
Toluene	TX	5140	10088809
Total trihalomethanes	TX	5205	10088809
trans-1,2-Dichloroethylene	TX	4700	10088809
Trichloroethene (Trichloroethylene)	TX	5170	10088809
Vinyl chloride	TX	5235	10088809
Xylene (total)	TX	5260	10088809
Method EPA 552.2			
Analyte	AB	Analyte ID	Method ID
Total haloacetic acids	TX	9414	10095804
Method SM 2340 C			
Analyte	AB	Analyte ID	Method ID
Total hardness as CaCO3	TX	1755	20047001
Method SM 2510 B			
Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	20048004
Method SM 2540 C			
Analyte Posiduo filtoroblo (TDS)	<b>AB</b> TX	Analyte ID	Method ID
Residue-filterable (TDS)	1.	1955	20049803
Method SM 2540 D	A D	Analyta ID	Mother
Analyte	AB	Analyte ID	Method ID





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019
Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Drinking Water			
Residue-nonfilterable (TSS)	TX	1960	20004802
Method SM 4500-CN C,E			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	20092404
Method SM 4500-CN C,G			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	20093203
Method SM 4500-F C			
Analyte	AB	Analyte ID	Method ID
Fluoride	TX	1730	20101808
Method SM 4500-NO2 B			
Analyte	AB	Analyte ID	Method ID
Nitrite as N	TX	1840	20024004
Method SM 9215 B			
Analyte	AB	Analyte ID	Method ID
Heterotrophic plate count	TX	2555	20180001
Method SM 9221 C / E (A-1 Medium)			
Analyte	AB	Analyte ID	Method ID
Fecal coliforms (enumeration)	TX	2530	20196605
Method SM 9222 B (Endo Media)			
Analyte	AB	Analyte ID	Method ID
Total coliforms (enumeration)	TX	2500	20207403
Method SM 9222 B / G (NA-MUG)			
Analyte	AB	Analyte ID	Method ID
Escherichia coli (enumeration)	TX	2525	20202408
Method SM 9222 D (MFC Medium)		<u> </u>	
Analyte	AB	Analyte ID	Method ID
Fecal coliforms (enumeration)	TX	2530	20210008
Method SM 9223-IDEXX Laboratories Colilert® Test			
Analyte	АВ	Analyte ID	Method ID
Total coliforms and E. coli (P/A)	TX	2502	20212413





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

AB	Analyte ID	Method ID
TX	2525	20211603
TX	2500	20211603
AB	Analyte ID	Method ID
TX	2502	20214602
AB	Analyte ID	Method ID
TX	2525	20211603
TX	2500	20211603
	TX TX AB TX AB TX	TX 2525 TX 2500  AB Analyte ID TX 2502  AB Analyte ID TX 2525





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date:** 

3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Non-Potable Water			
Method ASTM D6503			
Analyte	AB	Analyte ID	Method ID
Enterococci	TX	2520	30032407
Method EPA 1010			
Analyte	AB	Analyte ID	Method ID
Ignitability	TX	1780	10116606
Method EPA 110.2			
Analyte	AB	Analyte ID	Method ID
Color	TX	1605	10005604
Method EPA 120.1			
Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	10006403
Method EPA 130.2			
Analyte	AB	Analyte ID	Method ID
Total hardness as CaCO3	TX	1755	10007202
Method EPA 1311			
Analyte	AB	Analyte ID	Method ID
TCLP	TX	849	10118806
Method EPA 1312			
Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003
Method EPA 150.1			
Analyte	AB	Analyte ID	Method ID
рН	TX	1900	10008409
Method EPA 160.1			
Analyte	AB	Analyte ID	Method ID
Residue-filterable (TDS)	TX	1955	10009208
Method EPA 160.2			
Analyte	AB	Analyte ID	Method ID
Residue-nonfilterable (TSS)	TX	1960	10009606
Method EPA 160.3			
Analyte	AB	Analyte ID	Method ID





3/31/2019

#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
Residue-total (total solids)	TX	1950	10010001
Method EPA 160.4			
Analyte	AB	Analyte ID	Method ID
Residue-volatile	TX	1970	10010409
Method EPA 1664			
Analyte	AB	Analyte ID	Method ID
n-Hexane Extractable Material (HEM) (O&G)	TX	1803	10127807
Silica Gel Treated n-Hexane Extractable Material (SGT-HEM)	TX	10220	10127807
Method EPA 180.1			
Analyte	AB	Analyte ID	Method ID
Turbidity	TX	2055	10011606
Method EPA 200.7			
Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10013806
Antimony	TX	1005	10013806
Arsenic	TX	1010	10013806
Barium	TX	1015	10013806
Beryllium	TX	1020	10013806
Boron	TX	1025	10013806
Cadmium	TX	1030	10013806
Calcium	TX	1035	10013806
Chromium	TX	1040	10013806
Cobalt	TX	1050	10013806
Copper	TX	1055	10013806
Iron	TX	1070	10013806
Lead	TX	1075	10013806
Lithium	TX	1080	10013806
Magnesium	TX	1085	10013806
Manganese	TX	1090	10013806
Molybdenum	TX	1100	10013806
Nickel	TX	1105	10013806





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Phosphorus	Matrix: Non-Potable Water			
Selenium         TX         1140         10013806           Silica as SiO2         TX         1990         10013806           Silver         TX         1150         10013806           Sodium         TX         1155         10013806           Stontium         TX         1165         10013806           Strontium         TX         1165         10013806           Thallium         TX         1175         10013806           Tin         TX         1175         10013806           Titanium         TX         1185         10013806           Vanadium         TX         1180         10013806           Zinc         TX         1185         10013806           Vanadium         TX         1185         10013806           Zinc         TX         1190         10013806           Zinc         TX         11000         10014605           Zinc	Phosphorus	TX	1910	10013806
Silica as SiO2       TX       1990       10013806         Silver       TX       1150       10013806         Sodium       TX       1155       10013806         Strontium       TX       1160       10013806         Thallium       TX       1165       10013806         Tin       TX       1175       10013806         Titanium       TX       1180       10013806         Vanadium       TX       1185       10013806         Zinc       TX       1190       10013806         Vanadium       TX       1190       10013806         Method ID       Method ID       10013806         Analyte       AB       Analyte ID       Method ID         Alaminum       TX       1000       10014605         Arsenic       TX	Potassium	TX	1125	10013806
Silver         TX         1150         10013806           Sodium         TX         1155         10013806           Strontium         TX         1160         10013806           Thallium         TX         1165         10013806           Tin         TX         1175         10013806           Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Vanadium         TX         1190         10013806           Alethod EPA 200.8         Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1015         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055 </td <td>Selenium</td> <td>TX</td> <td>1140</td> <td>10013806</td>	Selenium	TX	1140	10013806
Sodium         TX         1155         10013806           Strontium         TX         1160         10013806           Thallium         TX         1165         10013806           Tin         TX         1175         10013806           Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Vanadium         TX         1190         10013806           Arenchod EPA 200.8         Analyte ID         Method ID         10013806           All Strain Interval Inte	Silica as SiO2	TX	1990	10013806
Strontium         TX         1160         10013806           Thallium         TX         1165         10013806           Tin         TX         1175         10013806           Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Vanadium         TX         1190         10013806           Antimory         TX         1000         10013806           Arsenic         TX         1000         10014605           Barium         TX         1015         10014605           Beryllium         TX         1015         10014605           Cadmium         TX         1030         10014605           Cohalt         TX         1040         10014605           Cobalt         TX         1050         10014605	Silver	TX	1150	10013806
Thallium         TX         1165         10013806           Tin         TX         1175         10013806           Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Zinc         TX         1190         10013806           Zinc         TX         1000         10014605           Analyte         AB         Analyte ID         Method ID           Alluminum         TX         1005         10014605           Arsenic         TX         1005         10014605           Barium         TX         1010         10014605           Beryllium         TX<	Sodium	TX	1155	10013806
Tin         TX         1175         10013806           Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Zinc         TX         1190         10013806           Method EPA 200.8         Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055         10014605           Iron         TX         1070         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         100	Strontium	TX	1160	10013806
Titanium         TX         1180         10013806           Vanadium         TX         1185         10013806           Zinc         TX         1190         10013806           Method EPA 200.8           Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055         10014605           Iron         TX         1070         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         10014605           Nickel         TX         110	Thallium	TX	1165	10013806
Vanadium         TX         1185         10013806           Zinc         TX         1190         10013806           Method EPA 200.8           Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055         10014605           Iron         TX         1070         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         10014605           Nickel         TX         1105         10014605           Selenium         TX         114	Tin	TX	1175	10013806
Zinc         TX         1190         10013806           Method EPA 200.8           Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055         10014605           Iron         TX         1070         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         10014605           Nickel         TX         1105         10014605           Selenium         TX         1140         10014605	Titanium	TX	1180	10013806
Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1075         10014605           Iron         TX         1075         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         10014605           Nickel         TX         1105         10014605           Selenium         TX         1140         10014605	Vanadium	TX	1185	10013806
Analyte         AB         Analyte ID         Method ID           Aluminum         TX         1000         10014605           Antimony         TX         1005         10014605           Arsenic         TX         1010         10014605           Barium         TX         1015         10014605           Beryllium         TX         1020         10014605           Cadmium         TX         1030         10014605           Chromium         TX         1040         10014605           Cobalt         TX         1050         10014605           Copper         TX         1055         10014605           Iron         TX         1070         10014605           Lead         TX         1075         10014605           Manganese         TX         1090         10014605           Molybdenum         TX         1100         10014605           Nickel         TX         1105         10014605           Selenium         TX         1140         10014605	Zinc	TX	1190	10013806
Aluminum       TX       1000       10014605         Antimony       TX       1005       10014605         Arsenic       TX       1010       10014605         Barium       TX       1015       10014605         Beryllium       TX       1020       10014605         Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Method EPA 200.8			
Antimony       TX       1005       10014605         Arsenic       TX       1010       10014605         Barium       TX       1015       10014605         Beryllium       TX       1020       10014605         Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605			Analyte ID	Method ID
Arsenic       TX       1010       10014605         Barium       TX       1015       10014605         Beryllium       TX       1020       10014605         Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Aluminum	TX	1000	10014605
Barium       TX       1015       10014605         Beryllium       TX       1020       10014605         Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Antimony	TX	1005	10014605
Beryllium       TX       1020       10014605         Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Arsenic	TX	1010	10014605
Cadmium       TX       1030       10014605         Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Barium	TX	1015	10014605
Chromium       TX       1040       10014605         Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Beryllium	TX	1020	10014605
Cobalt       TX       1050       10014605         Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Cadmium	TX	1030	10014605
Copper       TX       1055       10014605         Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Chromium	TX	1040	10014605
Iron       TX       1070       10014605         Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Cobalt	TX	1050	10014605
Lead       TX       1075       10014605         Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Copper	TX	1055	10014605
Manganese       TX       1090       10014605         Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Iron	TX	1070	10014605
Molybdenum       TX       1100       10014605         Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Lead	TX	1075	10014605
Nickel       TX       1105       10014605         Selenium       TX       1140       10014605	Manganese	TX	1090	10014605
Selenium TX 1140 10014605	Molybdenum	TX	1100	10014605
	Nickel	TX	1105	10014605
Silver TX 1150 10014605	Selenium	TX	1140	10014605
	Silver	TX	1150	10014605





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019 4/1/2018

Issue Date:

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water		,	
Thallium	TX	1165	10014605
Thorium	TX	1170	10014605
Uranium	TX	3035	10014605
Vanadium	TX	1185	10014605
Zinc	TX	1190	10014605
Method EPA 245.1			
Analyte	AB	Analyte ID	Method ID
Mercury	TX	1095	10036609
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Orthophosphate as P	TX	1870	10053200
Sulfate	TX	2000	10053200
Method EPA 305.1			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	TX	1500	10276207
Method EPA 310.1			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	TX	1505	10054805
Method EPA 330.5			
Analyte	AB	Analyte ID	Method ID
Total residual chlorine	TX	1940	10059606
Method EPA 335.1			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	10060001





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T104704213-18-17

Expiration Date: Issue Date:

3/31/2019 4/1/2018

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10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
Method EPA 335.2			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	10278203
Method EPA 340.2			
Analyte	AB	Analyte ID	Method ID
Fluoride	TX	1730	10062201
Method EPA 350.3			
Analyte	АВ	Analyte ID	Method ID
Ammonia as N	TX	1515	10064401
Method EPA 351.4			
Analyte	AB	Analyte ID	Method ID
Kjeldahl Nitrogen (Total Kjeldahl Nitrogen-TKN)	TX	1790	10066203
Method EPA 353.2			
Analyte	AB	Analyte ID	Method ID
Nitrate-nitrite	TX	1820	10067400
Method EPA 353.3			
Analyte	АВ	Analyte ID	Method ID
Nitrate-nitrite	TX	1820	10068005
Method EPA 354.1			
Analyte	АВ	Analyte ID	Method ID
Nitrite as N	TX	1840	10068607
Method EPA 360.1			
Analyte	AB	Analyte ID	Method ID
Oxygen, dissolved	TX	1880	10069008
Method EPA 365.2			
Analyte	AB	Analyte ID	Method ID
Orthophosphate as P	TX	1870	10070403
Phosphorus	TX	1910	10070403
Method EPA 370.1			
Analyte	AB	Analyte ID	Method ID
Silica as SiO2	TX	1990	10072001





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T104704213-18-17

**Expiration Date:** 

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4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Non-Potable Water			
Method EPA 376.1			
Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	10074201
Method EPA 376.2			
Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	10074609
Nethod EPA 377.1			
Analyte	AB	Analyte ID	Method ID
Sulfite	TX	2015	10075000
Method EPA 405.1			
Analyte	AB	Analyte ID	Method ID
Biochemical oxygen demand (BOD)	TX	1530	10075602
Carbonaceous BOD, CBOD	TX	1555	10075602
Method EPA 410.4			
Analyte	AB	Analyte ID	Method ID
Chemical oxygen demand (COD)	TX	1565	10077404
Method EPA 415.1			
Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	TX	2040	10078407
Method EPA 420.1			
Analyte	AB	Analyte ID	Method ID
Total phenolics	TX	1905	10079400
Method EPA 524.2			
Analyte	AB	Analyte ID	Method ID
Benzene	TX	4375	10088809
Chloroform	TX	4505	10088809
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10155905
Antimony	TX	1005	10155905
Arsenic	TX	1010	10155905





#### **NELAP - Recognized Laboratory Fields of Accreditation**

T104704213-18-17 Certificate:

**Expiration Date:** 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

atrix: Non-Potable Water			
Barium	TX	1015	10155905
Beryllium	TX	1020	10155905
Boron	TX	1025	10155905
Cadmium	TX	1030	10155905
Calcium	TX	1035	10155905
Chromium	TX	1040	10155905
Cobalt	TX	1050	10155905
Copper	TX	1055	10155905
Iron	TX	1070	10155905
Lead	TX	1075	10155905
Lithium	TX	1080	10155905
Magnesium	TX	1085	10155905
Manganese	TX	1090	10155905
Molybdenum	TX	1100	10155905
Nickel	TX	1105	10155905
Potassium	TX	1125	10155905
Selenium	TX	1140	10155905
Silica as SiO2	TX	1990	10155905
Silver	TX	1150	10155905
Sodium	TX	1155	10155905
Strontium	TX	1160	10155905
Thallium	TX	1165	10155905
Tin	TX	1175	10155905
Titanium	TX	1180	10155905
Vanadium	TX	1185	10155905
Zinc	TX	1190	10155905
ethod EPA 602			
Analyte	AB	Analyte ID	Method ID
Benzene	TX	4375	10102202
Ethylbenzene	TX	4765	10102202





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
m+p-xylene	TX	5240	10102202
Methyl tert-butyl ether (MTBE)	TX	5000	10102202
o-Xylene	TX	5250	10102202
Toluene	TX	5140	10102202
Xylene (total)	TX	5260	10102202
Method EPA 6020			
<b>Analyte</b> Aluminum	<b>AB</b> TX	Analyte ID	Method ID
	TX	1000	10156204
Antimony	TX	1005	10156204
Arsenic	TX	1010	10156204
Barium	TX	1015	10156204
Beryllium		1020	10156204
Cadmium	TX	1030	10156204
Chromium	TX	1040	10156204
Cobalt	TX	1050	10156204
Copper	TX	1055	10156204
Iron	TX	1070	10156204
Lead	TX	1075	10156204
Manganese	TX	1090	10156204
Molybdenum	TX	1100	10156204
Nickel	TX	1105	10156204
Selenium	TX	1140	10156204
Silver	TX	1150	10156204
Thallium	TX	1165	10156204
Vanadium	TX	1185	10156204
Zinc	TX	1190	10156204
Method EPA 608			
Analyte 4,4'-DDD	<b>AB</b> TX	Analyte ID 7355	<b>Method ID</b> 10103603
4,4'-DDE	TX	7360	10103603
4,4'-DDT	TX	7365	10103603
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#### **NELAP - Recognized Laboratory Fields of Accreditation**

T104704213-18-17 Certificate:

**Expiration Date:** 3/31/2019 Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100

Houston, TX 77029-1919

Matrix: Non-Potable Water			
Aldrin	TX	7025	10103603
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10103603
alpha-Chlordane	TX	7240	10103603
Aroclor-1016 (PCB-1016)	TX	8880	10103603
Aroclor-1221 (PCB-1221)	TX	8885	10103603
Aroclor-1232 (PCB-1232)	TX	8890	10103603
Aroclor-1242 (PCB-1242)	TX	8895	10103603
Aroclor-1248 (PCB-1248)	TX	8900	10103603
Aroclor-1254 (PCB-1254)	TX	8905	10103603
Aroclor-1260 (PCB-1260)	TX	8910	10103603
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10103603
Chlordane (tech.)	TX	7250	10103603
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10103603
Dieldrin	TX	7470	10103603
Endosulfan I	TX	7510	10103603
Endosulfan II	TX	7515	10103603
Endosulfan sulfate	TX	7520	10103603
Endrin	TX	7540	10103603
Endrin aldehyde	TX	7530	10103603
Endrin ketone	TX	7535	10103603
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10103603
gamma-Chlordane	TX	7245	10103603
Heptachlor	TX	7685	10103603
Heptachlor epoxide	TX	7690	10103603
Methoxychlor	TX	7810	10103603
Toxaphene (Chlorinated camphene)	TX	8250	10103603
Method EPA 610			
Analyte	AB	Analyte ID	Method ID
Acenaphthene	TX	5500	10104402
Acenaphthylene	TX	5505	10104402





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Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

Issue Date: 4/1/2018

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10100 East Freeway, Suite 100 Houston, TX 77029-1919

Anthracene	TX	5555	10104402
Benzo(a)anthracene	TX	5575	10104402
Benzo(a)pyrene	TX	5580	10104402
Benzo(b)fluoranthene	TX	5585	10104402
Benzo(g,h,i)perylene	TX	5590	10104402
Benzo(k)fluoranthene	TX	5600	10104402
Chrysene	TX	5855	10104402
Dibenz(a,h) anthracene	TX	5895	10104402
Fluoranthene	TX	6265	10104402
Fluorene	TX	6270	10104402
Indeno(1,2,3-cd) pyrene	TX	6315	10104402
Naphthalene	TX	5005	10104402
Phenanthrene	TX	6615	10104402
Pyrene	TX	6665	10104402
Method EPA 615			
Analyte	AB	Analyte ID	Method ID
2,4,5-T	TX	8655	10298201
2,4-D	TX	8545	10298201
2,4-DB	TX	8560	10298201
Dalapon	TX	8555	10298201
Dicamba	TX	8595	10298201
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10298201
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10298201
MCPA	TX	7775	10298201
Silvex (2,4,5-TP)	TX	8650	10298201
Method EPA 624			
Analyte	AB	Analyte ID	Method ID
1,1,1-Trichloroethane	TX	5160	10107207
1,1,2,2-Tetrachloroethane	TX	5110	10107207
1,1,2-Trichloroethane	TX	5165	10107207
1,1-Dichloroethane	TX	4630	10107207





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Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

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10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
1,1-Dichloroethylene	TX	4640	10107207
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10107207
1,2-Dichlorobenzene	TX	4610	10107207
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10107207
1,2-Dichloropropane	TX	4655	10107207
1,3-Dichlorobenzene	TX	4615	10107207
1,4-Dichlorobenzene	TX	4620	10107207
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10107207
2-Chloroethyl vinyl ether	TX	4500	10107207
Acetone (2-Propanone)	TX	4315	10107207
Acrolein (Propenal)	TX	4325	10107207
Acrylonitrile	TX	4340	10107207
Benzene	TX	4375	10107207
Bromodichloromethane	TX	4395	10107207
Bromoform	TX	4400	10107207
Carbon tetrachloride	TX	4455	10107207
Chlorobenzene	TX	4475	10107207
Chlorodibromomethane	TX	4575	10107207
Chloroethane (Ethyl chloride)	TX	4485	10107207
Chloroform	TX	4505	10107207
cis-1,2-Dichloroethylene	TX	4645	10107207
cis-1,3-Dichloropropene	TX	4680	10107207
Ethylbenzene	TX	4765	10107207
m+p-xylene	TX	5240	10107207
Methyl bromide (Bromomethane)	TX	4950	10107207
Methyl chloride (Chloromethane)	TX	4960	10107207
Methyl tert-butyl ether (MTBE)	TX	5000	10107207
Methylene chloride (Dichloromethane)	TX	4975	10107207
Naphthalene	TX	5005	10107207
o-Xylene	TX	5250	10107207





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Expiration Date: 3/31/2019

Issue Date: 4/1/2018

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10100 East Freeway, Suite 100 Houston, TX 77029-1919

latrix: Non-Potable Water			
Tetrachloroethylene (Perchloroethylene)	TX	5115	10107207
Toluene	TX	5140	10107207
trans-1,2-Dichloroethylene	TX	4700	10107207
trans-1,3-Dichloropropylene	TX	4685	10107207
Trichloroethene (Trichloroethylene)	TX	5170	10107207
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10107207
Vinyl chloride	TX	5235	10107207
Xylene (total)	TX	5260	10107207
lethod EPA 625			
Analyte	AB	Analyte ID	Method ID
1,2,4,5-Tetrachlorobenzene	TX	6715	10107401
1,2,4-Trichlorobenzene	TX	5155	10107401
1,2-Dichlorobenzene	TX	4610	10107401
1,2-Diphenylhydrazine	TX	6220	10107401
1,3-Dichlorobenzene	TX	4615	10107401
1,4-Dichlorobenzene	TX	4620	10107401
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10107401
2,3,4,6-Tetrachlorophenol	TX	6735	10107401
2,4,5-Trichlorophenol	TX	6835	10107401
2,4,6-Trichlorophenol	TX	6840	10107401
2,4-Dichlorophenol	TX	6000	10107401
2,4-Dimethylphenol	TX	6130	10107401
2,4-Dinitrophenol	TX	6175	10107401
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10107401
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10107401
2-Chloronaphthalene	TX	5795	10107401
2-Chlorophenol	TX	5800	10107401
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10107401
2-Methylphenol (o-Cresol)	TX	6400	10107401
2-Nitrophenol	TX	6490	10107401





3/31/2019

#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
3,3'-Dichlorobenzidine	TX	5945	10107401
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10107401
4-Chloro-3-methylphenol	TX	5700	10107401
4-Chlorophenyl phenylether	TX	5825	10107401
4-Nitrophenol	TX	6500	10107401
Acenaphthene	TX	5500	10107401
Acenaphthylene	TX	5505	10107401
Anthracene	TX	5555	10107401
Benzidine	TX	5595	10107401
Benzo(a)anthracene	TX	5575	10107401
Benzo(a)pyrene	TX	5580	10107401
Benzo(b)fluoranthene	TX	5585	10107401
Benzo(g,h,i)perylene	TX	5590	10107401
Benzo(k)fluoranthene	TX	5600	10107401
bis(2-Chloroethoxy)methane	TX	5760	10107401
bis(2-Chloroethyl) ether	TX	5765	10107401
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10107401
Butyl benzyl phthalate	TX	5670	10107401
Chrysene	TX	5855	10107401
Dibenz(a,h) anthracene	TX	5895	10107401
Diethyl phthalate	TX	6070	10107401
Dimethyl phthalate	TX	6135	10107401
Di-n-butyl phthalate	TX	5925	10107401
Di-n-octyl phthalate	TX	6200	10107401
Fluoranthene	TX	6265	10107401
Fluorene	TX	6270	10107401
Hexachlorobenzene	TX	6275	10107401
Hexachlorobutadiene	TX	4835	10107401
Hexachlorocyclopentadiene	TX	6285	10107401
Hexachloroethane	TX	4840	10107401





### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

latrix: Non-Potable Water			
Indeno(1,2,3-cd) pyrene	TX	6315	10107401
Isophorone	TX	6320	10107401
Naphthalene	TX	5005	10107401
Nitrobenzene	TX	5015	10107401
n-Nitrosodiethylamine	TX	6525	10107401
n-Nitrosodimethylamine	TX	6530	10107401
n-Nitrosodi-n-butylamine	TX	5025	10107401
n-Nitrosodi-n-propylamine	TX	6545	10107401
n-Nitrosodiphenylamine	TX	6535	10107401
Pentachlorobenzene	TX	6590	10107401
Pentachlorophenol	TX	6605	10107401
Phenanthrene	TX	6615	10107401
Phenol	TX	6625	10107401
Pyrene	TX	6665	10107401
Pyridine	TX	5095	10107401
Nethod EPA 632			
Analyte	AB	Analyte ID	Method ID
Carbaryl (Sevin)	TX	7195	10108608
lethod EPA 7196			
Analyte	AB	Analyte ID	Method ID
Chromium (VI)	TX	1045	10162400
Method EPA 7470			
Analyte	<b>AB</b> TX	Analyte ID	Method ID
Mercury	IX	1095	10165603
Method EPA 8015	AD	Amalista ID	Made ad ID
Analyte Acetone (2-Propanone)	<b>AB</b> TX	Analyte ID 4315	Method ID 10173203
Allyl alcohol	TX	4313	10173203
Diesel range organics (DRO)	TX	9369	10173203
Ethanol	TX	9369 4750	10173203
Ethylene glycol	TX	4730 4785	10173203
Eurylene grycor	17	4/03	101/3203





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100

Houston, TX 77029-1919

Matrix. Non-Potable Water
verify the laboratory's current accreditation status for particular methods and analyses.
These fields of accreditation supercede all previous fields. The Texas Commission on Environmental Quality urges customers to

latrix: Non-Potable Water			
Ethylene oxide	TX	4795	10173203
Gasoline range organics (GRO)	TX	9408	10173203
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10173203
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10173203
Methanol	TX	4930	10173203
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10173203
n-Propanol (1-Propanol)	TX	5055	10173203
Propylene Glycol	TX	6657	10173203
tert-Butyl alcohol	TX	4420	10173203
Method EPA 8021			
Analyte	AB	Analyte ID	Method ID
Benzene	TX	4375	10174808
Ethylbenzene	TX	4765	10174808
m+p-xylene	TX	5240	10174808
Methyl tert-butyl ether (MTBE)	TX	5000	10174808
o-Xylene	TX	5250	10174808
Toluene	TX	5140	10174808
Xylene (total)	TX	5260	10174808
Method EPA 8081			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	TX	7355	10178606
4,4'-DDE	TX	7360	10178606
4,4'-DDT	TX	7365	10178606
Aldrin	TX	7025	10178606
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10178606
alpha-Chlordane	TX	7240	10178606
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10178606
Chlordane (tech.)	TX	7250	10178606
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10178606
Dicofol (Kelthane)	TX	7460	10178606
Dieldrin	TX	7470	10178606





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
Endosulfan I	TX	7510	10178606
Endosulfan II	TX	7515	10178606
Endosulfan sulfate	TX	7520	10178606
Endrin	TX	7540	10178606
Endrin aldehyde	TX	7530	10178606
Endrin ketone	TX	7535	10178606
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10178606
gamma-Chlordane	TX	7245	10178606
Heptachlor	TX	7685	10178606
Heptachlor epoxide	TX	7690	10178606
Hexachlorobenzene	TX	6275	10178606
Methoxychlor	TX	7810	10178606
Mirex	TX	7870	10178606
Toxaphene (Chlorinated camphene)	TX	8250	10178606
Nethod EPA 8082			
Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	TX	8880	10179201
Aroclor-1221 (PCB-1221)	TX	8885	10179201
Aroclor-1232 (PCB-1232)	TX	8890	10179201
Aroclor-1242 (PCB-1242)	TX	8895	10179201
Aroclor-1248 (PCB-1248)	TX	8900	10179201
Aroclor-1254 (PCB-1254)	TX	8905	10179201
Aroclor-1260 (PCB-1260)	TX	8910	10179201
PCBs (total)	TX	8870	10179201
Nethod EPA 8141			
Analyte	AB	Analyte ID	Method ID
Azinphos-methyl (Guthion)	TX	7075	10182204
Chlorpyrifos (Dursban)	TX	7300	10182204
Demeton	TX	7390	10182204
Demeton-o	TX	7395	10182204
Diazinon	TX	7410	10182204
Diazinon		,	1010==0.





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

atrix: Non-Potable Water	TV	7.475	10102204
Dimethoate	TX	7475	10182204
Disulfoton	TX	8625	10182204
EPN (Phosphonothioic acid, phenyl-, O-ethyl O-(p-nitrophenyl) ester)	TX	7550	10182204
Ethion	TX	7565	10182204
Ethoprop	TX	7570	10182204
Famphur	TX	7580	10182204
Malathion	TX	7770	10182204
Methyl parathion (Parathion, methyl)	TX	7825	10182204
Monocrotophos	TX	7880	10182204
Parathion, ethyl	TX	7955	10182204
Phorate	TX	7985	10182204
Phosmet (Imidan)	TX	8000	10182204
Terbufos	TX	8185	10182204
lethod EPA 8151			
Analyte	AB	Analyte ID	Method ID
2,4,5-T	TX	8655	10183207
2,4-D	TX	8545	10183207
2,4-DB	TX	8560	10183207
Dalapon	TX	8555	10183207
Dicamba	TX	8595	10183207
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10183207
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10183207
MCPA	TX	7775	10183207
MCPP	TX	7780	10183207
Pentachlorophenol	TX	6605	10183207
Silvex (2,4,5-TP)	TX	8650	10183207
ethod EPA 8260			
Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	TX	5105	10184802
1,1,1-Trichloroethane	TX	5160	10184802
1,1,2,2-Tetrachloroethane	TX	5110	10184802





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	TX	5195	10184802
1,1,2-Trichloroethane	TX	5165	10184802
1,1-Dichloroethane	TX	4630	10184802
1,1-Dichloroethylene	TX	4640	10184802
1,1-Dichloropropene	TX	4670	10184802
1,2,3-Trichlorobenzene	TX	5150	10184802
1,2,3-Trichloropropane	TX	5180	10184802
1,2,4-Trichlorobenzene	TX	5155	10184802
1,2,4-Trimethylbenzene	TX	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184802
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184802
1,2-Dichlorobenzene	TX	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184802
1,2-Dichloropropane	TX	4655	10184802
1,3,5-Trimethylbenzene	TX	5215	10184802
1,3-Dichlorobenzene	TX	4615	10184802
1,3-Dichloropropane	TX	4660	10184802
1,4-Dichlorobenzene	TX	4620	10184802
1,4-Dioxane (1,4-Diethyleneoxide)	TX	4735	10184802
1-Chlorohexane	TX	4510	10184802
2,2-Dichloropropane	TX	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184802
2-Chloroethyl vinyl ether	TX	4500	10184802
2-Chlorotoluene	TX	4535	10184802
2-Hexanone (MBK)	TX	4860	10184802
2-Nitropropane	TX	5020	10184802
2-Pentanone	TX	5045	10184802
3-Chloropropionitrile	TX	4530	10184802
4-Chlorotoluene	TX	4540	10184802
4-Isopropyltoluene (p-Cymene)	TX	4915	10184802





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
4-Methyl-2-pentanone (MIBK)	TX	4995	10184802
Acetone (2-Propanone)	TX	4315	10184802
Acetonitrile	TX	4320	10184802
Acrolein (Propenal)	TX	4325	10184802
Acrylonitrile	TX	4340	10184802
Allyl chloride (3-Chloropropene)	TX	4355	10184802
Benzene	TX	4375	10184802
Benzyl chloride	TX	5635	10184802
Bromobenzene	TX	4385	10184802
Bromochloromethane	TX	4390	10184802
Bromodichloromethane	TX	4395	10184802
Bromoform	TX	4400	10184802
Carbon disulfide	TX	4450	10184802
Carbon tetrachloride	TX	4455	10184802
Chlorobenzene	TX	4475	10184802
Chlorodibromomethane	TX	4575	10184802
Chloroethane (Ethyl chloride)	TX	4485	10184802
Chloroform	TX	4505	10184802
cis-1,2-Dichloroethylene	TX	4645	10184802
cis-1,3-Dichloropropene	TX	4680	10184802
cis-1,4-Dichloro-2-butene	TX	4600	10184802
Crotonaldehyde	TX	4545	10184802
Dibromomethane (Methylene bromide)	TX	4595	10184802
Dichlorodifluoromethane (Freon-12)	TX	4625	10184802
Diethyl ether	TX	4725	10184802
Di-isopropylether (DIPE)	TX	9375	10184802
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	TX	4745	10184802
Ethyl acetate	TX	4755	10184802
Ethyl methacrylate	TX	4810	10184802
Ethylbenzene	TX	4765	10184802





3/31/2019

### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

trix: Non-Potable Water			
Ethylene oxide	TX	4795	10184802
Ethyl-t-butylether (ETBE) (2-Ethoxy-2-methylpropane)	TX	4770	10184802
Hexachlorobutadiene	TX	4835	10184802
lodomethane (Methyl iodide)	TX	4870	10184802
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10184802
Isopropylbenzene (Cumene)	TX	4900	10184802
m+p-xylene	TX	5240	10184802
Methacrylonitrile	TX	4925	10184802
Methyl acetate	TX	4940	10184802
Methyl acrylate	TX	4945	10184802
Methyl bromide (Bromomethane)	TX	4950	10184802
Methyl chloride (Chloromethane)	TX	4960	10184802
Methyl methacrylate	TX	4990	10184802
Methyl tert-butyl ether (MTBE)	TX	5000	10184802
Methylcyclohexane	TX	4965	10184802
Methylene chloride (Dichloromethane)	TX	4975	10184802
Naphthalene	TX	5005	10184802
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10184802
n-Butylbenzene	TX	4435	10184802
n-Propylbenzene	TX	5090	10184802
o-Xylene	TX	5250	10184802
Pentachloroethane	TX	5035	10184802
sec-Butylbenzene	TX	4440	10184802
Styrene	TX	5100	10184802
T-amylmethylether (TAME)	TX	4370	10184802
tert-Butylbenzene	TX	4445	10184802
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184802
Toluene	TX	5140	10184802
Total trihalomethanes	TX	5205	10184802
trans-1,2-Dichloroethylene	TX	4700	10184802





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Expiration Date: 3/31/2019

Issue Date: 4/1/2018

 ${\bf A}$  &  ${\bf B}$  Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
trans-1,3-Dichloropropylene	TX	4685	10184802
trans-1,4-Dichloro-2-butene	TX	4605	10184802
Trichloroethene (Trichloroethylene)	TX	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184802
Vinyl acetate	TX	5225	10184802
Vinyl chloride	TX	5235	10184802
Xylene (total)	TX	5260	10184802
Method EPA 8270			
Analyte	AB	Analyte ID	Method ID
1,2,4,5-Tetrachlorobenzene	TX	6715	10186002
1,2,4-Trichlorobenzene	TX	5155	10186002
1,2-Dichlorobenzene	TX	4610	10186002
1,2-Diphenylhydrazine	TX	6220	10186002
1,3,5-Trinitrobenzene (1,3,5-TNB)	TX	6885	10186002
1,3-Dichlorobenzene	TX	4615	10186002
1,3-Dinitrobenzene (1,3-DNB)	TX	6160	10186002
1,4-Dichlorobenzene	TX	4620	10186002
1,4-Naphthoquinone	TX	6420	10186002
1-Chloronaphthalene	TX	5790	10186002
1-Naphthylamine	TX	6425	10186002
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10186002
2,3,4,6-Tetrachlorophenol	TX	6735	10186002
2,4,5-Trichlorophenol	TX	6835	10186002
2,4,6-Trichlorophenol	TX	6840	10186002
2,4-Dichlorophenol	TX	6000	10186002
2,4-Dimethylphenol	TX	6130	10186002
2,4-Dinitrophenol	TX	6175	10186002
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10186002
2,6-Dichlorophenol	TX	6005	10186002
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019
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A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
2-Acetylaminofluorene	TX	5515	10186002
2-Chloronaphthalene	TX	5795	10186002
2-Chlorophenol	TX	5800	10186002
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10186002
2-Methylnaphthalene	TX	6385	10186002
2-Methylphenol (o-Cresol)	TX	6400	10186002
2-Naphthylamine	TX	6430	10186002
2-Nitroaniline	TX	6460	10186002
2-Nitrophenol	TX	6490	10186002
2-Picoline (2-Methylpyridine)	TX	5050	10186002
3,3'-Dichlorobenzidine	TX	5945	10186002
3,3'-Dimethylbenzidine	TX	6120	10186002
3-Methylcholanthrene	TX	6355	10186002
3-Methylphenol (m-Cresol)	TX	6405	10186002
3-Nitroaniline	TX	6465	10186002
4,4'-Methylenebis(n,n-dimethylaniline)	TX	6370	10186002
4-Aminobiphenyl	TX	5540	10186002
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10186002
4-Chloro-1,3-phenylenediamine	TX	5850	10186002
4-Chloro-3-methylphenol	TX	5700	10186002
4-Chloroaniline	TX	5745	10186002
4-Chlorophenyl phenylether	TX	5825	10186002
4-Methylphenol (p-Cresol)	TX	6410	10186002
4-Nitroaniline	TX	6470	10186002
4-Nitrophenol	TX	6500	10186002
5-Nitro-o-toluidine	TX	6570	10186002
7,12-Dimethylbenz(a) anthracene	TX	6115	10186002
Acenaphthene	TX	5500	10186002
Acenaphthylene	TX	5505	10186002
Acetophenone	TX	5510	10186002





### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019
Issue Date: 4/1/2018

A & B Environmental Services, Inc. 10100 East Freeway, Suite 100

Houston, TX 77029-1919

atrix: Non-Potable Water			
Aniline	TX	5545	10186002
Anthracene	TX	5555	10186002
Aramite	TX	5560	10186002
Atrazine	TX	7065	10186002
Azobenzene	TX	5562	10186002
Benzenethiol (Thiophenol)	TX	6750	10186002
Benzidine	TX	5595	10186002
Benzo(a)anthracene	TX	5575	10186002
Benzo(a)pyrene	TX	5580	10186002
Benzo(b)fluoranthene	TX	5585	10186002
Benzo(g,h,i)perylene	TX	5590	10186002
Benzo(k)fluoranthene	TX	5600	10186002
Benzoic acid	TX	5610	10186002
Benzyl alcohol	TX	5630	10186002
Biphenyl	TX	5640	10186002
bis(2-Chloroethoxy)methane	TX	5760	10186002
bis(2-Chloroethyl) ether	TX	5765	10186002
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10186002
Butyl benzyl phthalate	TX	5670	10186002
Caprolactam	TX	7180	10186002
Carbazole	TX	5680	10186002
Chlorobenzilate	TX	7260	10186002
Chrysene	TX	5855	10186002
Dibenz(a,h) anthracene	TX	5895	10186002
Dibenz(a,j) acridine	TX	5900	10186002
Dibenzofuran	TX	5905	10186002
Diethyl phthalate	TX	6070	10186002
Dimethyl phthalate	TX	6135	10186002
Di-n-butyl phthalate	TX	5925	10186002
Di-n-octyl phthalate	TX	6200	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10186002
Diphenylamine	TX	6205	10186002
Ethyl methanesulfonate	TX	6260	10186002
Fluoranthene	TX	6265	10186002
Fluorene	TX	6270	10186002
Hexachlorobenzene	TX	6275	10186002
Hexachlorobutadiene	TX	4835	10186002
Hexachlorocyclopentadiene	TX	6285	10186002
Hexachloroethane	TX	4840	10186002
Hexachlorophene	TX	6290	10186002
Indeno(1,2,3-cd) pyrene	TX	6315	10186002
Isodrin	TX	7725	10186002
Isophorone	TX	6320	10186002
Isosafrole	TX	6325	10186002
Methapyrilene	TX	6345	10186002
Methyl methanesulfonate	TX	6375	10186002
Naphthalene	TX	5005	10186002
Nitrobenzene	TX	5015	10186002
n-Nitrosodiethylamine	TX	6525	10186002
n-Nitrosodimethylamine	TX	6530	10186002
n-Nitrosodi-n-butylamine	TX	5025	10186002
n-Nitrosodi-n-propylamine	TX	6545	10186002
n-Nitrosodiphenylamine	TX	6535	10186002
n-Nitrosomethylethylamine	TX	6550	10186002
n-Nitrosomorpholine	TX	6555	10186002
n-Nitrosopiperidine	TX	6560	10186002
n-Nitrosopyrrolidine	TX	6565	10186002
Pentachlorobenzene	TX	6590	10186002
Pentachloronitrobenzene (PCNB)	TX	6600	10186002
Pentachlorophenol	TX	6605	10186002





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

4/1/2018 Issue Date:

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100

Houston, TX 77029-1919

atrix: Non-Potable Water			
Phenacetin	TX	6610	10186002
Phenanthrene	TX	6615	10186002
Phenol	TX	6625	10186002
Phorate	TX	7985	10186002
Pronamide (Kerb)	TX	6650	10186002
Pyrene	TX	6665	10186002
Pyridine	TX	5095	10186002
Quinoline	TX	6670	10186002
Safrole	TX	6685	10186002
lethod EPA 8310			
Analyte	АВ	Analyte ID	Method ID
Acenaphthene	TX	5500	10187607
Acenaphthylene	TX	5505	10187607
Anthracene	TX	5555	10187607
Benzo(a)anthracene	TX	5575	10187607
Benzo(a)pyrene	TX	5580	10187607
Benzo(b)fluoranthene	TX	5585	10187607
Benzo(g,h,i)perylene	TX	5590	10187607
Benzo(k)fluoranthene	TX	5600	10187607
Chrysene	TX	5855	10187607
Dibenz(a,h) anthracene	TX	5895	10187607
Fluoranthene	TX	6265	10187607
Fluorene	TX	6270	10187607
Indeno(1,2,3-cd) pyrene	TX	6315	10187607
Naphthalene	TX	5005	10187607
Phenanthrene	TX	6615	10187607
Pyrene	TX	6665	10187607
lethod EPA 8315			
Analyte	AB	Analyte ID	Method ID
Acetaldehyde	TX	4300	10187801
Benzaldehyde	TX	5570	10187801





### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Non-Potable Water			
Formaldehyde	TX	4815	10187801
Method EPA 8316			
Analyte	AB	Analyte ID	Method ID
Acrolein (Propenal)	TX	4325	10188202
Acrylamide	TX	4330	10188202
Acrylonitrile	TX	4340	10188202
Method EPA 9014			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	10193803
Total cyanide	TX	1645	10193803
Method EPA 9020			
Analyte	AB	Analyte ID	Method ID
Total organic halides (TOX)	TX	2045	10194000
Method EPA 9040			
Analyte	AB	Analyte ID	Method ID
рН	TX	1900	10196802
Method EPA 9056			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209
Nitrite as N	TX	1840	10199209
Orthophosphate as P	TX	1870	10199209
Sulfate	TX	2000	10199209
Method EPA 9060			
Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	TX	2040	10200201
Method EPA 9065			
Analyte	AB	Analyte ID	Method ID





### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston TX 77029-1919

Houston, TX 77029-1919

Matrix: Non-Potable Water			
Total phenolics	TX	1905	10200405
Method EPA 9213			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	10206209
Method EPA RSK 175			
Analyte	AB	Analyte ID	Method ID
2-methylpropane (Isobutane)	TX	4942	10212905
Carbon dioxide	TX	3755	10212905
Ethane	TX	4747	10212905
Ethene	TX	4752	10212905
Methane	TX	4926	10212905
n-Butane	TX	5007	10212905
n-Propane	TX	5029	10212905
Method SM 2120 B			
Analyte	AB	Analyte ID	Method ID
Color	TX	1605	20223807
Method SM 2130 B			
Analyte	AB	Analyte ID	Method ID
Turbidity	TX	2055	20042200
Method SM 2310 B (4a)			
Analyte	AB	Analyte ID	Method ID
Acidity, as CaCO3	TX	1500	20002806
Method SM 2320 B			
Analyte	AB	Analyte ID	Method ID
Alkalinity as CaCO3	TX	1505	20045005
Method SM 2340 B			
Analyte	AB	Analyte ID	Method ID
Total hardness as CaCO3	TX	1755	20046008
Method SM 2340 C			
Analyte	AB	Analyte ID	Method ID
Total hardness as CaCO3	TX	1755	20047001





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date:** 

3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Method SM 2510 B			
Analyte	AB	Analyte ID	Method ID
Conductivity	TX	1610	20048004
Method SM 2540 B			
Analyte	AB	Analyte ID	Method ID
Residue-total (total solids)	TX	1950	20004608
Method SM 2540 C			
Analyte	AB	Analyte ID	Method ID
Residue-filterable (TDS)	TX	1955	20049803
Nethod SM 2540 D			
Analyte	AB	Analyte ID	Method ID
Residue-nonfilterable (TSS)	TX	1960	20004802
Method SM 3500-Cr B			
Analyte	AB	Analyte ID	Method ID
Chromium (VI)	TX	1045	20065809
Nethod SM 4500-CI G			
Analyte	AB	Analyte ID	Method ID
Total residual chlorine	TX	1940	20020604
Nethod SM 4500-CN C			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	20020808
Method SM 4500-CN E			
Analyte	AB	Analyte ID	Method ID
Total cyanide	TX	1645	20021209
Method SM 4500-CN G			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	20021607
Method SM 4500-F C			
Analyte	AB	Analyte ID	Method ID
Fluoride	TX	1730	20101808
Method SM 4500-H+ B			
Analyte	AB	Analyte ID	Method ID





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date:** 

3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

latrix: Non-Potable Water			
рН	TX	1900	20104603
Method SM 4500-NH3 D			
Analyte	AB	Analyte ID	Method ID
Ammonia as N	TX	1515	20108809
Kjeldahl Nitrogen (Total Kjeldahl Nitrogen-TKN)	TX	1790	20108809
Method SM 4500-NO2 B			
Analyte	AB	Analyte ID	Method ID
Nitrite as N	TX	1840	20024004
lethod SM 4500-NO3 E			
Analyte	АВ	Analyte ID	Method ID
Nitrate-nitrite	TX	1820	20114209
lethod SM 4500-O G			
Analyte	AB	Analyte ID	Method ID
Oxygen, dissolved	TX	1880	20025405
lethod SM 4500-P E			
Analyte	AB	Analyte ID	Method ID
Orthophosphate as P	TX	1870	20025803
Phosphorus	TX	1910	20025803
lethod SM 4500-S2 D			
Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	20125400
lethod SM 4500-S2 F			
Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	20126209
lethod SM 4500-SiO2 D			
Analyte	AB	Analyte ID	Method ID
Silica as SiO2	TX	1990	20127202
lethod SM 4500-SO3 B			
Analyte	AB	Analyte ID	Method ID
Sulfite	TX	2015	20026806
lethod SM 5210 B			
Analyte	AB	Analyte ID	Method ID





### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

 ${\bf A}$  &  ${\bf B}$  Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Biochemical oxygen demand (BOD)	TX	1530	20027401
Carbonaceous BOD, CBOD	TX	1555	20027401
Method SM 5220 D		1000	20027101
Analyte	AB	Analyte ID	Method ID
Chemical oxygen demand (COD)	TX	1565	20027809
Method SM 5310 B			
Analyte	AB	Analyte ID	Method ID
Total Organic Carbon (TOC)	TX	2040	20137206
Method SM 9215 B			
Analyte	AB	Analyte ID	Method ID
Heterotrophic plate count	TX	2555	20180001
Method SM 9221 C / 9221 E			
Analyte	AB	Analyte ID	Method ID
Fecal coliforms (enumeration)	TX	2530	20195806
Method SM 9222 B			
Analyte	AB	Analyte ID	Method ID
Total coliforms (enumeration)	TX	2500	20198009
Method SM 9222 B / 9222 G			
Analyte	AB	Analyte ID	Method ID
Escherichia coli (enumeration)	TX	2525	20201201
Method SM 9222 D			
Analyte	<b>AB</b> TX	Analyte ID	Method ID
Fecal coliforms (enumeration)	IA	2530	20037405
Method SM 9223 B	<b>A.D.</b>	A a la de ID	M - 411 1D
Analyte Escherichia celi (onumeration)	<b>AB</b> TX	Analyte ID	Method ID
Escherichia coli (enumeration)	1.4	2525	20211205
Method SM 9230 C	AD	Amalista ID	Made a d 15
Analyte Enterococci	<b>AB</b> TX	Analyte ID 2520	Method ID 20218002
Fecal streptococci	TX	2520 2540	20218002
·	17	2340	20218002
Method TCEQ 1005	AD	Analysis ID	Mathadin
Analyte	AB	Analyte ID	Method ID





**NELAP - Recognized Laboratory Fields of Accreditation** 

Certificate:

T104704213-18-17

**Expiration Date:** 

3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Non-Potable Water			
Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date: Issue Date:** 

3/31/2019 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Method EPA 1010	AD	Amalasta ID	Madhad ID
Analyte Ignitability	<b>AB</b> TX	Analyte ID 1780	<b>Method ID</b> 10116606
Method EPA 1311	•	1700	10110000
Analyte	АВ	Analyte ID	Method IE
TCLP	TX	849	10118806
Method EPA 1312			
Analyte	AB	Analyte ID	Method ID
SPLP	TX	850	10119003
Method EPA 300.0			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10053200
Chloride	TX	1575	10053200
Fluoride	TX	1730	10053200
Nitrate as N	TX	1810	10053200
Nitrate-nitrite	TX	1820	10053200
Nitrite as N	TX	1840	10053200
Orthophosphate as P	TX	1870	10053200
Sulfate	TX	2000	10053200
Method EPA 350.3			
Analyte	AB	Analyte ID	Method IE
Ammonia as N	TX	1515	10064401
Method EPA 6010			
Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10155905
Antimony	TX	1005	10155905
Arsenic	TX	1010	10155905
Barium	TX	1015	10155905
Beryllium	TX	1020	10155905
Boron	TX	1025	10155905
Cadmium	TX	1030	10155905





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

atrix: Solid & Chemical Materials			
Calcium	TX	1035	10155905
Chromium	TX	1040	10155905
Cobalt	TX	1050	10155905
Copper	TX	1055	10155905
Iron	TX	1070	10155905
Lead	TX	1075	10155905
Lithium	TX	1080	10155905
Magnesium	TX	1085	10155905
Manganese	TX	1090	10155905
Molybdenum	TX	1100	10155905
Nickel	TX	1105	10155905
Phosphorus	TX	1910	10155905
Potassium	TX	1125	10155905
Selenium	TX	1140	10155905
Silica as SiO2	TX	1990	10155905
Silver	TX	1150	10155905
Sodium	TX	1155	10155905
Strontium	TX	1160	10155905
Thallium	TX	1165	10155905
Tin	TX	1175	10155905
Titanium	TX	1180	10155905
Vanadium	TX	1185	10155905
Zinc	TX	1190	10155905
ethod EPA 6020			
Analyte	AB	Analyte ID	Method ID
Aluminum	TX	1000	10156204
Antimony	TX	1005	10156204
Arsenic	TX	1010	10156204
Barium	TX	1015	10156204
Beryllium	TX	1020	10156204





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019
Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Cadmium	TX	1030	10156204
Calcium	TX	1035	10156204
Chromium	TX	1040	10156204
Cobalt	TX	1050	10156204
Copper	TX	1055	10156204
Iron	TX	1070	10156204
Lead	TX	1075	10156204
Magnesium	TX	1085	10156204
Manganese	TX	1090	10156204
Molybdenum	TX	1100	10156204
Nickel	TX	1105	10156204
Potassium	TX	1125	10156204
Selenium	TX	1140	10156204
Silver	TX	1150	10156204
Sodium	TX	1155	10156204
Thallium	TX	1165	10156204
Vanadium	TX	1185	10156204
Zinc	TX	1190	10156204
Nethod EPA 7196			
Analyte	AB	Analyte ID	Method ID
Chromium (VI)	TX	1045	10162400
lethod EPA 7470			
Analyte	AB	Analyte ID	Method ID
Mercury	TX	1095	10165603
Method EPA 8015			
Analyte	AB	Analyte ID	Method ID
Acetone (2-Propanone)	TX	4315	10173203
Allyl alcohol	TX	4350	10173203
Diesel range organics (DRO)	TX	9369	10173203
Ethanol	TX	4750	10173203
Ethylene glycol	TX	4785	10173203





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Gasoline range organics (GRO)	TX	9408	10173203
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10173203
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10173203
Isopropyl alcohol (2-Propanol, Isopropanol)	TX	4895	10173203
Methanol	TX	4930	10173203
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10173203
n-Propanol (1-Propanol)	TX	5055	10173203
Propylene Glycol	TX	6657	10173203
tert-Butyl alcohol	TX	4420	10173203
Method EPA 8021			
Analyte	AB	Analyte ID	Method ID
Benzene	TX	4375	10174808
Ethylbenzene	TX	4765	10174808
m+p-xylene	TX	5240	10174808
Methyl tert-butyl ether (MTBE)	TX	5000	10174808
o-Xylene	TX	5250	10174808
Toluene	TX	5140	10174808
Xylene (total)	TX	5260	10174808
Method EPA 8081			
Analyte	AB	Analyte ID	Method ID
4,4'-DDD	TX	7355	10178606
4,4'-DDE	TX	7360	10178606
4,4'-DDT	TX	7365	10178606
Aldrin	TX	7025	10178606
alpha-BHC (alpha-Hexachlorocyclohexane)	TX	7110	10178606
alpha-Chlordane	TX	7240	10178606
beta-BHC (beta-Hexachlorocyclohexane)	TX	7115	10178606
Chlordane (tech.)	TX	7250	10178606
DDD,Total	TX	10314	10178606
DDT,Total	TX	10316	10178606
delta-BHC (delta-Hexachlorocyclohexane)	TX	7105	10178606





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Solid & Chemical Materials			
Dicofol (Kelthane)	TX	7460	10178606
Dieldrin	TX	7470	10178606
Endosulfan I	TX	7510	10178606
Endosulfan II	TX	7515	10178606
Endosulfan sulfate	TX	7520	10178606
Endrin	TX	7540	10178606
Endrin aldehyde	TX	7530	10178606
Endrin ketone	TX	7535	10178606
gamma-BHC (Lindane, gamma-Hexachlorocyclohexane)	TX	7120	10178606
gamma-Chlordane	TX	7245	10178606
Heptachlor	TX	7685	10178606
Heptachlor epoxide	TX	7690	10178606
Hexachlorobenzene	TX	6275	10178606
Methoxychlor	TX	7810	10178606
Mirex	TX	7870	10178606
Toxaphene (Chlorinated camphene)	TX	8250	10178606
Nethod EPA 8082			
Analyte	AB	Analyte ID	Method ID
Aroclor-1016 (PCB-1016)	TX	8880	10179201
Aroclor-1221 (PCB-1221)	TX	8885	10179201
Aroclor-1232 (PCB-1232)	TX	8890	10179201
Aroclor-1242 (PCB-1242)	TX	8895	10179201
Aroclor-1248 (PCB-1248)	TX	8900	10179201
Aroclor-1254 (PCB-1254)	TX	8905	10179201
Aroclor-1260 (PCB-1260)	TX	8910	10179201
PCBs (total)	TX	8870	10179201
Method EPA 8141			
Analyte	AB	Analyte ID	Method ID
Azinphos-methyl (Guthion)	TX	7075	10182204
Chlorpyrifos (Dursban)	TX	7300	10182204
Demeton	TX	7390	10182204





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019

> 4/1/2018 Issue Date:

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100

Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Demeton-o	TX	7395	10182204
Diazinon	TX	7410	10182204
Dimethoate	TX	7475	10182204
Disulfoton	TX	8625	10182204
EPN (Phosphonothioic acid, phenyl-, O-ethyl O-(p-nitrophenyl) ester)	TX	7550	10182204
Ethion	TX	7565	10182204
Ethoprop	TX	7570	10182204
Famphur	TX	7580	10182204
Malathion	TX	7770	10182204
Methyl parathion (Parathion, methyl)	TX	7825	10182204
Monocrotophos	TX	7880	10182204
Parathion, ethyl	TX	7955	10182204
Phorate	TX	7985	10182204
Phosmet (Imidan)	TX	8000	10182204
Terbufos	TX	8185	10182204
Method EPA 8151			
Analyte	AB	Analyte ID	Method ID
2,4,5-T	TX	8655	10183207
2,4-D	TX	8545	10183207
2,4-DB	TX	8560	10183207
Dalapon	TX	8555	10183207
Dicamba	TX	8595	10183207
Dichloroprop (Dichlorprop, Weedone)	TX	8605	10183207
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10183207
MCPA	TX	7775	10183207
MCPP	TX	7780	10183207
Silvex (2,4,5-TP)	TX	8650	10183207
Method EPA 8260			
Analyte	AB	Analyte ID	Method ID
1,1,1,2-Tetrachloroethane	TX	5105	10184802
1,1,1-Trichloroethane	TX	5160	10184802



A & B Environmental Services, Inc.

# **Texas Commission on Environmental Quality**



#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019
Issue Date: 4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
1,1,2,2-Tetrachloroethane	TX	5110	10184802
1,1,2-Trichloroethane	TX	5165	10184802
1,1-Dichloroethane	TX	4630	10184802
1,1-Dichloroethylene	TX	4640	10184802
1,1-Dichloropropene	TX	4670	10184802
1,2,3-Trichlorobenzene	TX	5150	10184802
1,2,3-Trichloropropane	TX	5180	10184802
1,2,4-Trichlorobenzene	TX	5155	10184802
1,2,4-Trimethylbenzene	TX	5210	10184802
1,2-Dibromo-3-chloropropane (DBCP)	TX	4570	10184802
1,2-Dibromoethane (EDB, Ethylene dibromide)	TX	4585	10184802
1,2-Dichlorobenzene	TX	4610	10184802
1,2-Dichloroethane (Ethylene dichloride)	TX	4635	10184802
1,2-Dichloropropane	TX	4655	10184802
1,3,5-Trimethylbenzene	TX	5215	10184802
1,3-Dichlorobenzene	TX	4615	10184802
1,3-Dichloropropane	TX	4660	10184802
1,4-Dichlorobenzene	TX	4620	10184802
1,4-Dioxane (1,4-Diethyleneoxide)	TX	4735	10184802
1-Chlorohexane	TX	4510	10184802
2,2-Dichloropropane	TX	4665	10184802
2-Butanone (Methyl ethyl ketone, MEK)	TX	4410	10184802
2-Chloroethyl vinyl ether	TX	4500	10184802
2-Chlorotoluene	TX	4535	10184802
2-Hexanone (MBK)	TX	4860	10184802
2-Nitropropane	TX	5020	10184802
2-Pentanone	TX	5045	10184802
3-Chloropropionitrile	TX	4530	10184802
4-Chlorotoluene	TX	4540	10184802
4-Isopropyltoluene (p-Cymene)	TX	4915	10184802





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Solid & Chemical Materials			
4-Methyl-2-pentanone (MIBK)	TX	4995	10184802
Acetone (2-Propanone)	TX	4315	10184802
Acetonitrile	TX	4320	10184802
Acrolein (Propenal)	TX	4325	10184802
Acrylonitrile	TX	4340	10184802
Allyl chloride (3-Chloropropene)	TX	4355	10184802
Benzene	TX	4375	10184802
Benzyl chloride	TX	5635	10184802
Bromobenzene	TX	4385	10184802
Bromochloromethane	TX	4390	10184802
Bromodichloromethane	TX	4395	10184802
Bromoform	TX	4400	10184802
Carbon disulfide	TX	4450	10184802
Carbon tetrachloride	TX	4455	10184802
Chlorobenzene	TX	4475	10184802
Chlorodibromomethane	TX	4575	10184802
Chloroethane (Ethyl chloride)	TX	4485	10184802
Chloroform	TX	4505	10184802
cis-1,2-Dichloroethylene	TX	4645	10184802
cis-1,3-Dichloropropene	TX	4680	10184802
cis-1,4-Dichloro-2-butene	TX	4600	10184802
Crotonaldehyde	TX	4545	10184802
Dibromofluoromethane	TX	4590	10184802
Dibromomethane (Methylene bromide)	TX	4595	10184802
Dichlorodifluoromethane (Freon-12)	TX	4625	10184802
Diethyl ether	TX	4725	10184802
Epichlorohydrin (1-Chloro-2,3-epoxypropane)	TX	4745	10184802
Ethyl acetate	TX	4755	10184802
Ethyl methacrylate	TX	4810	10184802
Ethylbenzene	TX	4765	10184802





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

atrix: Solid & Chemical Materials			
Ethylene oxide	TX	4795	10184802
Hexachlorobutadiene	TX	4835	10184802
Iodomethane (Methyl iodide)	TX	4870	10184802
Isobutyl alcohol (2-Methyl-1-propanol)	TX	4875	10184802
Isopropylbenzene (Cumene)	TX	4900	10184802
m+p-xylene	TX	5240	10184802
Methacrylonitrile	TX	4925	10184802
Methyl acetate	TX	4940	10184802
Methyl acrylate	TX	4945	10184802
Methyl bromide (Bromomethane)	TX	4950	10184802
Methyl chloride (Chloromethane)	TX	4960	10184802
Methyl methacrylate	TX	4990	10184802
Methyl tert-butyl ether (MTBE)	TX	5000	10184802
Methylcyclohexane	TX	4965	10184802
Methylene chloride (Dichloromethane)	TX	4975	10184802
Naphthalene	TX	5005	10184802
n-Butyl alcohol (1-Butanol, n-Butanol)	TX	4425	10184802
n-Butylbenzene	TX	4435	10184802
n-Propylbenzene	TX	5090	10184802
o-Xylene	TX	5250	10184802
Pentachloroethane	TX	5035	10184802
sec-Butylbenzene	TX	4440	10184802
Styrene	TX	5100	10184802
tert-Butyl alcohol	TX	4420	10184802
tert-Butylbenzene	TX	4445	10184802
Tetrachloroethylene (Perchloroethylene)	TX	5115	10184802
Toluene	TX	5140	10184802
trans-1,2-Dichloroethylene	TX	4700	10184802
trans-1,3-Dichloropropylene	TX	4685	10184802
trans-1,4-Dichloro-2-butene	TX	4605	10184802





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Trichloroethene (Trichloroethylene)	TX	5170	10184802
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	TX	5175	10184802
Vinyl acetate	TX	5225	10184802
Vinyl chloride	TX	5235	10184802
Xylene (total)	TX	5260	10184802
Method EPA 8270			
Analyte	AB	Analyte ID	Method ID
1,2,4,5-Tetrachlorobenzene	TX	6715	10186002
1,2,4-Trichlorobenzene	TX	5155	10186002
1,2-Dichlorobenzene	TX	4610	10186002
1,2-Diphenylhydrazine	TX	6220	10186002
1,3,5-Trinitrobenzene (1,3,5-TNB)	TX	6885	10186002
1,3-Dichlorobenzene	TX	4615	10186002
1,3-Dinitrobenzene (1,3-DNB)	TX	6160	10186002
1,4-Dichlorobenzene	TX	4620	10186002
1,4-Naphthoquinone	TX	6420	10186002
1-Naphthylamine	TX	6425	10186002
2,2'-Oxybis(1-chloropropane) (bis(2-Chloro-1-methylethyl)ether)	TX	4659	10186002
2,3,4,6-Tetrachlorophenol	TX	6735	10186002
2,4,5-Trichlorophenol	TX	6835	10186002
2,4,6-Trichlorophenol	TX	6840	10186002
2,4-Dichlorophenol	TX	6000	10186002
2,4-Dimethylphenol	TX	6130	10186002
2,4-Dinitrophenol	TX	6175	10186002
2,4-Dinitrotoluene (2,4-DNT)	TX	6185	10186002
2,6-Dichlorophenol	TX	6005	10186002
2,6-Dinitrotoluene (2,6-DNT)	TX	6190	10186002
2-Acetylaminofluorene	TX	5515	10186002
2-Chloronaphthalene	TX	5795	10186002
2-Chlorophenol	TX	5800	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

trix: Solid & Chemical Materials			
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	TX	6360	10186002
2-Methylnaphthalene	TX	6385	10186002
2-Methylphenol (o-Cresol)	TX	6400	10186002
2-Naphthylamine	TX	6430	10186002
2-Nitroaniline	TX	6460	10186002
2-Nitrophenol	TX	6490	10186002
2-Picoline (2-Methylpyridine)	TX	5050	10186002
3,3'-Dichlorobenzidine	TX	5945	10186002
3,3'-Dimethylbenzidine	TX	6120	10186002
3-Methylcholanthrene	TX	6355	10186002
3-Methylphenol (m-Cresol)	TX	6405	10186002
3-Nitroaniline	TX	6465	10186002
4,4'-Methylenebis(n,n-dimethylaniline)	TX	6370	10186002
4-Aminobiphenyl	TX	5540	10186002
4-Bromophenyl phenyl ether (BDE-3)	TX	5660	10186002
4-Chloro-3-methylphenol	TX	5700	10186002
4-Chloroaniline	TX	5745	10186002
4-Chlorophenyl phenylether	TX	5825	10186002
4-Methylphenol (p-Cresol)	TX	6410	10186002
4-Nitroaniline	TX	6470	10186002
4-Nitrophenol	TX	6500	10186002
5-Nitro-o-toluidine	TX	6570	10186002
7,12-Dimethylbenz(a) anthracene	TX	6115	10186002
Acenaphthene	TX	5500	10186002
Acenaphthylene	TX	5505	10186002
Acetophenone	TX	5510	10186002
Aniline	TX	5545	10186002
Anthracene	TX	5555	10186002
Aramite	TX	5560	10186002
Atrazine	TX	7065	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Natrix: Solid & Chemical Materials			
Benzenethiol (Thiophenol)	TX	6750	10186002
Benzidine	TX	5595	10186002
Benzo(a)anthracene	TX	5575	10186002
Benzo(a)pyrene	TX	5580	10186002
Benzo(b)fluoranthene	TX	5585	10186002
Benzo(g,h,i)perylene	TX	5590	10186002
Benzo(k)fluoranthene	TX	5600	10186002
Benzoic acid	TX	5610	10186002
Benzyl alcohol	TX	5630	10186002
Biphenyl	TX	5640	10186002
bis(2-Chloroethoxy)methane	TX	5760	10186002
bis(2-Chloroethyl) ether	TX	5765	10186002
bis(2-Ethylhexyl) phthalate (Di(2-Ethylhexyl) phthalate, DEHP)	TX	6065	10186002
Butyl benzyl phthalate	TX	5670	10186002
Caprolactam	TX	7180	10186002
Carbazole	TX	5680	10186002
Chlorobenzilate	TX	7260	10186002
Chrysene	TX	5855	10186002
Dibenz(a,h) anthracene	TX	5895	10186002
Dibenz(a,j) acridine	TX	5900	10186002
Dibenzofuran	TX	5905	10186002
Diethyl phthalate	TX	6070	10186002
Dimethyl phthalate	TX	6135	10186002
Di-n-butyl phthalate	TX	5925	10186002
Di-n-octyl phthalate	TX	6200	10186002
Dinoseb (2-sec-butyl-4,6-dinitrophenol, DNBP)	TX	8620	10186002
Diphenylamine	TX	6205	10186002
Ethyl methanesulfonate	TX	6260	10186002
Fluoranthene	TX	6265	10186002
Fluorene	TX	6270	10186002





#### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

**Expiration Date:** 3/31/2019 4/1/2018

Issue Date:

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

trix: Solid & Chemical Materials			
Hexachlorobenzene	TX	6275	10186002
Hexachlorobutadiene	TX	4835	10186002
Hexachlorocyclopentadiene	TX	6285	10186002
Hexachloroethane	TX	4840	10186002
Hexachlorophene	TX	6290	10186002
Hexachlorophene	TX	6290	10186002
Indeno(1,2,3-cd) pyrene	TX	6315	10186002
Isodrin	TX	7725	10186002
Isophorone	TX	6320	10186002
Isosafrole	TX	6325	10186002
Methapyrilene	TX	6345	10186002
Methyl methanesulfonate	TX	6375	10186002
Naphthalene	TX	5005	10186002
Nitrobenzene	TX	5015	10186002
n-Nitrosodiethylamine	TX	6525	10186002
n-Nitrosodimethylamine	TX	6530	10186002
n-Nitrosodi-n-butylamine	TX	5025	10186002
n-Nitrosodi-n-propylamine	TX	6545	10186002
n-Nitrosodiphenylamine	TX	6535	10186002
n-Nitrosomethylethylamine	TX	6550	10186002
n-Nitrosomorpholine	TX	6555	10186002
n-Nitrosopiperidine	TX	6560	10186002
n-Nitrosopyrrolidine	TX	6565	10186002
Pentachlorobenzene	TX	6590	10186002
Pentachloronitrobenzene (PCNB)	TX	6600	10186002
Pentachlorophenol	TX	6605	10186002
Phenacetin	TX	6610	10186002
Phenanthrene	TX	6615	10186002
Phenol	TX	6625	10186002
Phorate	TX	7985	10186002





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate: T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Pronamide (Kerb)	TX	6650	10186002
Pyrene	TX	6665	10186002
Pyridine	TX	5095	10186002
Quinoline	TX	6670	10186002
Safrole	TX	6685	10186002
Method EPA 8310			
Analyte	AB	Analyte ID	Method ID
Acenaphthene	TX	5500	10187607
Acenaphthylene	TX	5505	10187607
Anthracene	TX	5555	10187607
Benzo(a)anthracene	TX	5575	10187607
Benzo(a)pyrene	TX	5580	10187607
Benzo(b)fluoranthene	TX	5585	10187607
Benzo(g,h,i)perylene	TX	5590	10187607
Benzo(k)fluoranthene	TX	5600	10187607
Chrysene	TX	5855	10187607
Dibenz(a,h) anthracene	TX	5895	10187607
Fluoranthene	TX	6265	10187607
Fluorene	TX	6270	10187607
Indeno(1,2,3-cd) pyrene	TX	6315	10187607
Naphthalene	TX	5005	10187607
Phenanthrene	TX	6615	10187607
Pyrene	TX	6665	10187607
Method EPA 8315			
Analyte	AB	Analyte ID	Method ID
Acetaldehyde	TX	4300	10187801
Benzaldehyde	TX	5570	10187801
Formaldehyde	TX	4815	10187801
Method EPA 8316			
Analyte	AB	Analyte ID	Method ID
Acrolein (Propenal)	TX	4325	10188202





#### **NELAP - Recognized Laboratory Fields of Accreditation**

**Certificate:** T104704213-18-17

Expiration Date: 3/31/2019

Issue Date: 4/1/2018

A & B Environmental Services, Inc.

10100 East Freeway, Suite 100 Houston, TX 77029-1919

Matrix: Solid & Chemical Materials			
Acrylamide	TX	4330	10188202
Acrylonitrile	TX	4340	10188202
Method EPA 9014			
Analyte	AB	Analyte ID	Method ID
Amenable cyanide	TX	1510	10193803
Total cyanide	TX	1645	10193803
Method EPA 9023			
Analyte	AB	Analyte ID	Method ID
Extractable organics halides (EOX)	TX	1720	10195003
Method EPA 9034			
Analyte	AB	Analyte ID	Method ID
Sulfide	TX	2005	10196006
Method EPA 9040			
Analyte	AB	Analyte ID	Method ID
Corrosivity	TX	1615	10196802
рН	TX	1900	10196802
Method EPA 9045			
Analyte	AB	Analyte ID	Method ID
Corrosivity	TX	1615	10197805
рН	TX	1900	10197805
Method EPA 9056			
Analyte	AB	Analyte ID	Method ID
Bromide	TX	1540	10199209
Chloride	TX	1575	10199209
Fluoride	TX	1730	10199209
Nitrate as N	TX	1810	10199209
Nitrate-nitrite	TX	1820	10199209
Nitrite as N	TX	1840	10199209
Orthophosphate as P	TX	1870	10199209
Sulfate	TX	2000	10199209





### **NELAP - Recognized Laboratory Fields of Accreditation**

Certificate:

T104704213-18-17

**Expiration Date:** 

3/31/2019

Issue Date:

4/1/2018

10100 East Freeway, Suite 100 Houston, TX 77029-1919

A & B Environmental Services, Inc.

Matrix: Solid & Chemical Materials			
Method EPA 9065			
Analyte Total phenolics	<b>AB</b> TX	Analyte ID 1905	Method ID
·	17	1905	10200405
Method EPA 9095	• •	A 1 ( 15	
Analyte	AB	Analyte ID	Method ID
Paint Filter Liquids Test	TX	10312	10204203
Method SM 2540 G			
Analyte	AB	Analyte ID	Method ID
Residue-total (total solids)	TX	1950	20005203
Method SM 9221 C / 9221 E			
Analyte	AB	Analyte ID	Method ID
Fecal coliforms (enumeration)	TX	2530	20195806
Method SM 9222 B			
Analyte	AB	Analyte ID	Method ID
Total coliforms (enumeration)	TX	2500	20198009
Method SM 9222 D			
Analyte	AB	Analyte ID	Method ID
Fecal coliforms (enumeration)	TX	2530	20037405
Method SM 9223 B			
Analyte	AB	Analyte ID	Method ID
Escherichia coli (enumeration)	TX	2525	20211205
Method TCEQ 1005			
Analyte	AB	Analyte ID	Method ID
Total Petroleum Hydrocarbons (TPH)	TX	2050	90019208